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DAILY DIGEST

Prepared in the Press Service, Office of Information, U. S. Department of Agriculture to present items of interest to agriculture and to agricultural workers. Views and opinions in these items are not necessarily approved by the Department.

Vol. LXXIII, No. 1

Section 1

April 3, 1939

U.S.-TURKISH TRADE PACT

The United States and Turkey have pledged mutual tariff cuts on numerous products in a reciprocal agreement, formally concluded at Ankara, which represented the first extension of the administration's reciprocal trade program into the Near East. The twentieth nation to sign such an agreement with the United States, Turkey obtained 47 percent of all her imports last year from Germany, through barter arrangements, and only 10.5 percent from this country. The tariff concessions cover a large proportion of the total American-Turkish exchange of goods, which amounted last year to approximately \$31,500,000. The United States agreed to reduce duties on numerous Turkish agricultural and other products, and Turkey cut duties on American manufactured goods. Among the most important American products affected were lubricating oils, cattle hides, goat and kid upper leather, prunes and canned asparagus. The agreement becomes effective May 5 and is to continue indefinitely subject to two months notice of termination until the end of 1941, and six months notice thereafter. (A.P.).

EGG, POULTRY SITUATION

Prospects continue to favor increased egg production and increased production and marketings of poultry this year compared with last, the Bureau of Agricultural Economics reports in its poultry and egg situation. Favorable to larger production are the plentiful supplies of feed at relatively low prices, and farm poultry flocks that in early March were about 5 percent larger than in March last year. For the past two months, however, the feed-egg ration has held relatively constant--an added factor favoring increased production.

FIRE DAMAGES WILDLIFE

Eight species of bird life are facing extinction in Florida as a result of the fire that is devastating a million acres of land in the Everglades, according to a survey conducted by the National Association of Audubon Societies. The damage is not confined to birds, it was said. In Dade County at least a thousand raccoons died as a result of the fire. Among the species facing extinction in Florida, it was reported, are the large American egret, the gull-billed tern, the snowy egret, the Florida crane, the Audubon's caracara, the yellow-crowned night heron, the wood ibis and the roseate spoonbill. (New York Times.)

April 3, 1939

Senate, Agricultural appropriation bill, H.R. 5269, was re-
Mar. 30 ferred to the Committee on Appropriations. Mr. Bankhead
 submitted an amendment he intends to propose to the bill,
providing \$250,000,000 for parity payments. Mr. Wiley submitted an amend-
ment he intends to propose to the bill, providing for an additional \$100,-
000,000 for purchase and disposition of surplus commodities, but earmarking
\$50,000,000 of this for dairy products.

The Committee on Agriculture and Forestry reported with amendments the
following: S. 570, cost of production bill (see Daily Digest, p. 1, March
31) (a report will be submitted later); S. 1514, Bankhead cotton bill
(see same Daily Digest) (S. Rept. 237).

The Committee on Post Offices and Post Roads reported the following:
S. 1109, to amend the act to aid the states in making certain toll bridges
free by providing that funds available under such act may be used to match
regular secondary federal-aid road funds (with amendment) (S. Rept. 236);
S. 1985, to extend the time within which states may make toll bridges
free in order to qualify for aid under the act of August 14, 1937, (with-
out amendment) (S. Rept. 241).

The Committee on Agriculture and Forestry reported without amendment
the following: S. 1569, to amend section 344 (e) of the agricultural ad-
justment act of 1938 (national allotment for cotton) (S. Rept. 226).

The opinion of the Supreme Court regarding reciprocal taxation of
federal and state employees was ordered to be printed as S. Doc. 55.

Received from the Secretary (Acting) of Agriculture a letter trans-
mitting a proposed bill to permit movement of cattle in interstate com-
merce when affected by Bang's disease if under safeguards; to Com. on Ag-
riculture and Forestry.

House, Began debate on H.J. Res. 246, making additional appro-
Mar. 30 priation of \$100,000,000 for relief, 1939.

(Prepared by Office of Budget and Finance)

S.D. Stock Frequent complaints of livestock rustling have forced
Trucking Law enactment of a South Dakota law, effective July 1, under
 which all persons transporting livestock by motor vehicle,
for sale or barter, must have the stock inspected by a peace officer. In-
spection must be made in the county where the shipment originates or in
an adjoining county. A fee of 10 cents a head is allowed. (Dakota
Farmer, March 25.)

Migratory President Roosevelt has forwarded to Rep. Elliott of
Workers California a federal committee report recommending both
 an emergency and longtime program for dealing with the
problem of interstate migration into California. The President said the
report declared the migratory problem was a national one and not confined
to California. Among the proposals, the report suggested that the F.S.C.C.
and the F.S.A. give wider distribution of surpluses to needy migrants
and that the F.S.A. continue to provide camp facilities and small homes
for rural migrants. (.A.P.)

USDA Research Dr. Knight, Chief of the Bureau of Chemistry and Soils, Laboratories in a talk last week to the Farm Chemurgic Conference, discussed the four new regional research laboratories of the Department. Speaking of the search for new and profitable uses for waste and surplus farm products and byproducts, he said in part:

"Only about 9 percent of our enormous corn crop, usually running from 2 1/2 to 3 billion bushels, is used in the industrial field, and one-half of this enters the food market and one-fourth goes back to the farm in the form of food.

"Industrial utilization of wheat, outside the food and feed industries, dips almost not all into concentrated raw materials.

"Cotton is our most acute large-scale surplus problem. More than 98 percent of lint cotton that finds a market is spun into yarn.

"The peanut crop of more than one and a quarter billion pounds, in spite of the many things that have been made from its kernels, is used almost exclusively for food or feed.

"The citrus industry is going to be much bigger. Orange production has more than doubled in 20 years. Almost half of the nearly 40,000,000 trees are less than 15 years old and a fourth are only from 5 to 10 years old. So during the next 5 years we may expect 75 million boxes in contrast to the 58 million averages of the past 5 years.

"There are 5 times as many bearing grapefruit trees now as in 1920 and about 2/3 of these have not reached full bearing. It is quite likely the next 5 years will show an annual average of 35 million boxes compared with the 1937 production of a little less than 31 million. The outlet for citrus is almost entirely for food and most research has been on food uses.

"The number of apple trees in the country has been declining for year, but with growing competition from other fruits, falling foreign markets and better yields on the average, surpluses have piled up. With the annual crop about 150 million bushels--a commercial crop of 90 million--in several recent years apples not harvested on account of market conditions have reached 4 to 4 1/2 million bushels. In addition, the culls graded out at packing plants may average 120,000 tons and on top of this thousands of tons of processing wastes at juice, drying and canning plants.

"Diet trends have trebled the acreage of truck crops since 1920. The truck growers were receiving about 250 million dollars 12 years ago and about that same amount for twice the quantity of stuff during the last 5 years. The quick freezing industry is opening up new fields and about 70 million pounds of vegetables were put up this way in 1937.

"The Irish potato acreage remains fairly stable and consumption is inelastic, but because of variations in yield per acre crops and prices make sharp shifts. The average crop is about 400 million bushels and usually about 10 percent of the crop is culls. Another 10 percent is taken off by disease, freezing and shrinkage in storage. So there is a definite demand for profitable nonfood use of cull and second grade potatoes and sometimes for first grade.

"Sweetpotatoes are second only in importance to Irish potatoes among the vegetable crops--about 70 million bushels a year, most of them used

where grown for food and feed. In the South about 20 percent of the crop is culls, mostly wasted. The small cooperative sweetpotato starch plant at Laurel, Miss., processed 165,000 bushels last year, turning out 1,640,000 pounds of starch. But this is hardly out of the experimental stage.

"Nineteen states grow tobacco, an average crop of more than 1,335,000,000 pounds. Foreign production, aided by tariffs and other means, is competing more sharply with our tobacco. Twenty years ago we produced about 27 percent of the world total; now we grow 23 percent of it. There has been a steady decline particularly in the exports of fire-cured and dark air-cured types.

"Alfalfa gets special attention among the forage crops because it is now widely grown and the most important hay, with an annual production of 25 million tons, considerably ahead of clover and timothy.

"The dairy cows of this country produce annually more than one hundred billion pounds of milk containing 13 billion pounds of solids in the form of fats, proteins, carbohydrates and salts. This enormous production represents roughly 20 percent of the total farm income and approaches the combined value of cotton and wheat and tobacco. The dairy industry has become highly complex and surplus problems are often difficult because the perishable nature of the product causes much of the excess production to disappear. However, the economic effects of seasonal surpluses, which disappear in low-paying uses, make it highly desirable to search for new and more efficient ways of utilization in the industrial field, particularly for casein and milk sugar."

Planes Fight Forest Fires "The U. S. Forest Service has recently purchased a freighter model airplane, equipped with a 450-h.p. engine, for interesting experiments in fighting forest fires from the air," says A.K. in Scientific American (April). "Instrumentation on the ship is exceptionally complete to permit precision flying. In the bottom of the fuselage is a special floor with trap doors and a hatch opening. Through this containers of water or fire-fighting chemicals can be released. Before this new equipment can be put into practical service, a great deal of research will be necessary. The trajectory into space of inexpensive commercial containers must be studied. The bomb sight and release equipment must be perfected. A new technique must be developed by which pilots and 'fire bombers' will be able to protect our forests. Another study is that of dropping supplies, with the aid of simple parachutes, to fire crews or others cut off from usual methods of transportation. This basic research is of great importance and value."

Hybrid Corn Planter High-cost hybrid seed corn has brought about a need for a more precise seeder. Now one is on the market. It selects corn kernels by turning them on edge, since this measurement is most uniform. It has a foot lever which permits the planting of two, three or four kernels; and it provides for quarter-inch depth adjustments. The planter drops fertilizer at the right distance from the seed and has a self-cleaning boot to prevent the clogging of the dropper and the skipping of hills. (Country Home Magazine, April.)

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Vol. LXXIII, No. 2

Section 1

April 4, 1939

SENATE ADOPTS

COTTON BILL

"The Senate adopted yesterday a bill embodying part of a program to thaw out frozen export markets for cotton by selling back to farmers at a low price cotton pledged against loans made by the government," reports Charles W. Hurd in the New York Times. "The bill, which represents half of a proposal sponsored by Senators Bankhead and Smith, would authorize farmers to buy at five cents a pound up to 3,000,000 bales of cotton on which loans averaging a little under 9 cents per pound have been made. The bill suggested a price of 3 cents, but this was raised to 5 cents by an amendment sponsored by Minority Leader McNary. Majority Leader Barkley intervened to stop consideration until some time later this week of a companion bill proposing to pay a subsidy of 3 cents a pound on new cotton grown this year by producers who cooperate in acreage-limitations..."

HULL ON

BARTER

Secretary of State Hull emphatically asserted yesterday that German barter practices were destroying world markets, particularly for raw materials like cotton, and that Germany could blame herself alone for being cut off from the United States trade market. In issuing a statement to this effect, the Secretary of State took direct issue with German Economics Minister and Reichsbank President Walther Funk, who asserted last Thursday in Berlin that the flow of gold to the United States from abroad was disrupting currencies and international balances of payments and, by implication, forcing other nations into barter procedures. Noting specifically that his statement constituted a reply to the speech of the German Minister of Economics last week, the Secretary of State emphasized that United States and German trade methods were diametrically opposed. (New York Times.)

FEDERAL LAND

ACQUISITION

An attorney for the State of New York raised a question of States' rights yesterday in objecting to federal acquisition of lands in Allegany and Schuyler Counties for wildlife preserves and flood control projects. The Federal Government has started condemnation actions to acquire about 1,400 acres of waste land in the two counties. Assistant Attorney General Warren H. Gilman of New York told Federal Judge John Knight that the State is not opposed to wildlife or flood control programs, but does desire to say where such projects shall be located. George L. Grobe, Federal attorney, answered that such lands are those in which the government demands "exclusive jurisdiction." He said there was a distinction between exclusive jurisdiction and what he said would be "acquisition." (A.P.)

Alfalfa for Poultry Dr. L. E. Card, University of Illinois, who reviews recent poultry research in the Poultry Tribune, says in the April issue: "There is ample evidence in the poultry industry of the tendency to go to extremes in the use of certain management and feeding practices, a recent example being the use of alfalfa meal. Because it is known to be a valuable ingredient in poultry rations some persons have used it at too high levels. The results of a test at the Rhode Island Agricultural Experiment Station are of interest in this connection. Five different groups of hens were fed rations in which the mash used contained 0, 5, 10, 15, and 20 percent of alfalfa leaf meal. There was a close association between the amount of alfalfa fed and the depth of yolk color. Analysis of the yolk color showed an increase in the amount of red and a decrease in the amount of yellow and black with increasing levels of alfalfa leaf meal. Hatchability was not appreciably affected by any of the first four levels, but when 20 percent of alfalfa was fed there was a considerable decrease in hatching power. Similarly, egg production and efficiency of feed utilization in terms of eggs were lowest for the lot fed 20 percent of alfalfa leaf meal in the mash. While optimum levels of alfalfa were not established by these feeding trials, it is clear that too high levels are detrimental."

New Oat Varieties "Three new Iowa hybrid oats have been named after counties in that state," says Successful Farming (April). "They are Marion, Hancock, and Boone. Seed will be released for 1940 spring plantings. Differing from hybrid corn, produce from these seed oats may be planted year after year. Boone is early, has short, stiff, rust-resistant straw and a high degree of resistance to leaf rust and leaf-and-stem smut. Marion ripens at about the same time as the Iowar and Gopher varieties. In lodging resistance it is better than Iogold. Hancock produces a tall, stiff straw with high resistance to lodging. Belgium oats present a fine appearance, a high test weight per bushel, and command high prices in Indiana this spring. Tests conducted at the Indiana Experiment Station since 1915 fail to show where such imported oats have been equal in yield or quality to adapted varieties developed in this country...By the introduction of the Fulghum variety and the development of the Columbia, the Missouri station made decisive improvement in the oats crop of Missouri, according to the last station report. In combining the qualities of earliness, efficiency as a nurse crop, and ability to produce high yields, either of these varieties far surpasses any other kind of oats ever grown in Missouri. Both are widely popular. Columbia now represents much more than half the total oats crop of Missouri and is rapidly gaining favor in adjoining states. The degree of improvement added to Missouri oats by the development of the Columbia variety has seldom been equaled in other crops by plant-breeding."

Wallace on
Farm Plans

Secretary Wallace contributes an article, "Farm
Program: 1939 Model," to the New York Times Magazine

(April 2). He says in part: "While I believe it is wise for the United States to put herself strongly and competitively into the world market with her export products, I do not look on this as the ultimate objective. The altogether important thing is to bring about stability of market supplies and market prices. The great cause of world-wide depression in 1921 and again in the early Thirties was the accumulation of large stocks of raw materials. In this connection the Birmingham Chamber of Commerce, in England, has made a very interesting observation in a memorandum which it submitted on Jan. 30, last. Pointing out that the accumulation of surplus stocks which began in 1927 was 'a cause and not an effect' of world economic crisis, and warning that a surplus is again accumulating, the memorandum says that the world's 'agricultural production' can be controlled 'if for no other reason that that it must be.'

"'A condition where a bumper crop means ruination to farmers is too absurd to be allowed to continue,' the memorandum says. It recognizes that the fluctuations in the prices of primary products 'influence materially the prosperity of the manufacturing communities of the world' and declares: 'The evil effect is not limited to farmers; it repercusses on all of us, and it is just as much in our interest as in that of the farmers that it should be remedied.' The memorandum goes on to suggest: 'Nature's vagaries in the way of favorable or unfavorable seasons cannot be controlled, but they can be tackled by the formation of buffer pools which would absorb surplus accumulations of stocks and remove them from available market supplies in years of plenty and replenish such available supplies in lean years, thus keeping world supplies on a normal basis and preventing violent price fluctuations, somewhat on the lines of the Exchange Equalization Fund in London.' In other words, there is here a suggestion for the ever-normal-granary arrangement on a world-wide scale.

"What we need is a series of international commodity conferences which will provide export quotas, and effective ever-normal granaries or warehouses operating on an international scale backed up by effective production control to prevent excessive fluctuations in prices and supplies. The first step in obtaining an objective of this sort is to make a real success of the international wheat conference for which active preparatory work is now under way. If the different nations assembled at London work out and sign an agreement, the next step will be to hold an international cotton conference. In the meantime we shall probably be furnishing the various cotton-producing nations of the world some real competition instead of holding an umbrella over them and retiring from competition as during recent months."

Senate, Passed S. 572, providing for purchase of materials
Mar. 31 essential to national defense. As passed the Senate, this bill authorizes appropriations of \$10,000,000 a year for four years for purchase of various commodities, including Manila fiber, silk, wool, coffee, flaxseed, hides and rubber.

Mr. Guffey submitted an amendment which he intends to propose to H.R. 5269, agricultural appropriation bill for 1940, providing for increasing forest economics from \$121,295 to \$139,295.

Adjourned until April 3.

House, Passed H.J.Res. 246, making additional appropriation
Mar. 31 of \$100,000,000 for relief, 1939.

Adjourned until April 3.

(Prepared by Office of Budget and Finance.)

Crease "Chemical finishes are now being applied commercially
Resistant to fabrics to make them resistant to creasing," says Mar-
Fabrics garet S. Furry, Bureau of Home Economics, in the April
Journal of Home Economics. "...A well-established process of making fabrics^{crease} resistant consists in impregnating them with a synthetic resin...Twenty cotton, linen and rayon dress fabrics which had been commercially treated to develop a crease-resistant finish were purchased at a local store. The fabrics were 'linen-like' in that they had the appearance both in weave and design of linen fabrics. These fabrics were washed according to standardized methods...The linens had the most flexural resilience (a measure of resistance to creasing) and the linens about as much, but the cottons were somewhat less resilient...The method of laundering largely determines how much and for how long fabrics will keep their crease-resistant property. Rayons and linens particularly need to be laundered carefully in lukewarm water and neutral soap...Rayon crease-resistant fabrics may be ironed dry with a medium hot iron on the wrong side of the material. Linen fabrics should be slightly dampened. For cottons the method of laundering is not so important..."

"Co-ops in "Farmer Co-ops in Virginia" is the first of a series
Virginia" of popular bulletins by states, describing the high points of agricultural cooperation in each state. It is issued by the Farm Credit Administration and the author is R. C. Dorsey, of the Information and Extension Division.

Wisconsin "There's something to shout about in the fact that
Healthy Herds only 131 reactors were found among 170,000 Wisconsin cat-
tles recently tested for tuberculosis," says Lloyd Burling-
ham in the Country Home Magazine (April). "That is less than one-tenth of one percent, and represents a triumph in eradicating animal disease. 'The United States is now probably the safest country in the world in which to raise livestock,' says Dr. John R. Mohler, Chief of the Bureau of Animal Industry."

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Vol. LXXIII, No. 3

Section 1

April 5, 1939

ISOTOPE RESEARCH

An entirely new approach to the understanding of living organisms, through the use of isotopes, which permit the study of individual atoms within the cell, may be opened by a device explained yesterday at a meeting of the American Chemical Society, in a paper by Dr. Arthur Bramley and Dr. A. Keith Brewer of the U.S. Bureau of Chemistry and Soils. To some this method was seen as opening a new era of biological research as fundamental as that following the invention of the microscope, which made it possible for scientists to study the individual cells within the organism. An ample supply of isotopes of different varieties makes it possible to follow the atom through complex biological or chemical processes, a field long closed because of the practical impossibility of separating the isotopes of the elements. "The separation of the isotopes of the elements," the government chemists said, "is of vital importance for the chemical and biological research being developed at the present time. However, even up to a year ago, an adequate supply of these isotopes, with the exception of heavy hydrogen, was impossible to obtain." The method used by the chemists combines the features of two previous apparatuses. (Baltimore Sun.)

SENATE PASSES SALARY TAX

The Senate adopted yesterday, with two important amendments, a House bill to provide reciprocal assessment of income taxes against salaries received by federal and state employees, as permitted by recent decisions of the Supreme Court. The bill was returned to the House for a conference on the amendments. The first Senate amendment consisted of a specific statement that the bill would not work in reciprocal fashion behind January 1, 1939. It would make salaries received for all the current calendar year taxable, but would not be retroactive. The second amendment, inserted on motion by Senator Connally, provided for the application of the tax law to the salaries of all federal judges. (New York Times.)

DAIRYING PROSPECTS

Because feed costs have been low during the past several months, milk production has continued rather heavy since early last summer, the Bureau of Agricultural Economics reports. The number of milk cows also has begun to increase. "Looking ahead," the bureau says, "the stage is set for an increase in milk cow numbers. The extent to which the prospective increase will be realized will depend to some degree on the extent to which present favorable conditions are maintained." These might be seriously interrupted by drought, unfavorable prices and other adverse factors which cannot accurately be forecast. (Press.)

Civil Service The Civil Service Commission announces the following
Examinations examinations: No. 38 (unassembled) Chief, Wildlife Division, \$4600, National Park Service, Department of the Interior; No. 40 (unassembled) Associate Geologist, \$3200, Assistant Geologist, \$2600, Department of the Interior and Department of Agriculture. Applications must be on file not later than: (a) May 1, if received from States other than those named in (b); (b) May 4, if received from Arizona, California, Colorado, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Washington, Wyoming.

Chemical The meeting of the American Chemical Society, which
Convention opened Monday, is of more than ordinary interest and
 passing importance. Chemistry in its present stage of development represents a tremendous expansion in man's knowledge, and in his power as well. It touches the ordinary citizen in every phase of daily life, from his rudimentary conception of the universe to the safety of his physical well being. It directly affects in some degree his modes of thought and his manner of dress; his employment and his food; his health and his amusements. Too many people have fallen into the error of thinking of all physical and chemical science as being some kind of bookish necromancy, as magical in the hands of initiates as it is incomprehensible to laymen. The reverse is the case. The present meeting is largely concerned not with spectacular announcements and revolutionary "discoveries," but with progress reports indicating quite tentatively the nature of the problems now being faced, the work so far done toward solving them and the nature of the difficulties. Progress in chemistry, as in any other field of endeavor, knows no royal road, but only the methodical piecing together of relatively small bits of knowledge, slowly accumulated by dogged inquiry, observation and experiment. The public should welcome the convention as the useful and remarkable thing it is--not a fount of sensation, but an exhibition of patient labors. (Baltimore Sun, April 4.)

Fruit by Now you can send fruit by telegraph just the same
Telegraph as you wire flowers or money. An organization has recently been set up with branches in more than 1,000 cities all over the United States for the filling of telegraphic orders for delivery of fruit in baskets to individual consumers. This new service opens up an entirely new market for better fruit. (Kansas Farmer, March 25.)

Planning Plan Age (April) contains three articles: "A
 Proposal for National Planning" by Ernest S. Griffith;
"Land Conservation and Social Planning" by S. Von Ciriacy-Wantrup;
and "An Economic Aspect of Farm Crop Restriction" by J. K. Galbraith.

Legumes Aid
Soil and
Wildlife

Edward H. Graham, Soil Conservation Service, writing on "Legumes for Erosion Control and Wildlife" in Soil Conservation (March) says in part: "Among the leguminous plants most used by wildlife are a number of crops which are notably erosion-resistant, especially when they are sown with grasses or used in pasture mixtures. Among them is alfalfa, which is recognized as one of the principal foods of the sage hen, Columbian sharp-tailed grouse, and eastern bobwhite. The clovers vie with alfalfa as wildlife food. White clover is a preferred food of the prairie sharp-tailed grouse, is a favorite of the muskrat when available, and is consumed by ring-necked pheasant and sage hen. Red clover is nearly as promiscuously used, and is so much preferred by the woodchuck that, in the East, red-clover fields and woodchucks seem almost inseparable. California bur clover is another crop legume widely utilized by birds, especially by California quail; it has even been recorded from the stomachs of waterfowl, specifically baldpate, cinnamon teal, and green-winged teal. Garden peas are highly prized by wild animals as food, and among the two dozen animals known to eat them are the band-tailed pigeon, ring-necked pheasant, bobwhite, rose-breasted grosbeak, red-headed woodpecker, sage hen, and Baltimore oriole...A field border plant that is gaining great favor in the Southeastern States is the introduced perennial *Lespedeza sericea* which controls erosion on unproductive field borders and at the same time furnishes ground nesting cover for wildlife, and turn rows for teams working the field...Native *lespedeza* likewise show promise of combined usefulness in soil and wildlife conservation; all of them possess the advantage of being perennial. Among them *Lespedeza virginica* would seem a promising plant to do throughout the East what *L. sericea* has done so successfully in the South. It is much like *L. sericea* in habit, grows well on dry, poor soil, and is a good soil improver. Its wildlife record includes use by bobwhite and wild turkey. Other native *lespedezas*, which vary in habit from prostrate or low species to tall coarse forms, are known to be utilized by wildlife for food, and show inherent soil-preserving tendencies..."

Feed Grain
Supply

A supply of feed grains per animal unit about the same as the pre-drought average is in prospect for the 1939-40 season, the Bureau of Agricultural Economics reports. The supply is expected to be smaller than last year, however. This prospect for the 1939-40 feeding period, the Bureau said in its spring outlook issue of the Feed Grain Situation, is based on 1923-32 average yields, normal abandonment on prospective plantings, and an allowance for a considerable increase in the livestock population, particularly in hog and poultry. It was pointed out that production of corn, oats, barley, and the grain sorghums this year would be around 91 million tons. This would be about 6 million tons less than in 1938 and 9 million tons below the 1928-32 average. But the prospective large carry-over into the 1939 harvest season probably would bring total supplies of feed grains for 1939-40 to "about the pre-drought average".

Senate, Began debate on H.R. 3790, relating to the salary
 Apr. 3 tax bill. An amendment making federal officials immune from state income taxation prior to January 1, 1939, was agreed to. The bill does not contain the fats-oils amendments.

The Joint Committee Committee to Investigate the Tennessee Valley Authority submitted its final report (S.Doc. 56).

The Committee on Education and Labor reported with amendments S.1305, the Harrison-Thomas Federal Aid to Education Bill (S.Rept. 244).

The Committee on Judiciary reported without amendment S. 1416, making all government employees subject to the Employees Compensation Act (S.Rept. 243).

Mr. Wiley submitted an amendment which he intends to propose to the Agricultural Appropriation Bill, H.R. 5269, to increase forest products from \$628,361 to \$1,000,000. Mr. Wheeler submitted amendments to the same bill, as follows: increasing forest management from \$593,403 to \$623,403; earmarking \$58,350 for the Northern Rocky Mountain Forest and Range Experiment Station; providing \$1,500,000 for construction of roads and development of mineralized areas within National Forests.

Mr. Nye submitted an amendment which he intends to propose to S.1710, to provide for cancelation of certain farm loans.

Mr. Brown, Mr. Bone and Mr. Connally submitted amendments which they intend to propose to H.R. 3790, salary tax bill.

Received the annual report of activities of the Agricultural Experiment Stations; to Com. on Agriculture and Forestry.

Received a supplemental estimate of appropriation of \$15,000 for the Council of Personnel Administration, 1939; to Com. on Appropriations.

House, Considering bills on the consent calendar, passed
 Apr. 3 the following: S. 1363, to repeal section 101 (e) (4) of the Agricultural Adjustment Act of 1938, under which it is provided that if the acreage planted on any farm is less than 80 percent of the farm acreage allotment, the farm acreage allotment shall be 25 percent in excess of the planted acreage (this bill will now be sent to the President).

H.R. 3800, reducing the limitation on soil conservation payments from \$10,000 to \$5,000, was passed over after brief discussion.

(Prepared by Office of Budget and Finance.)

Grades of Superphosphate A. L. Mehring, Bureau of Chemistry and Soils, writes in the Fertilizer Review (January-February) on superphosphate grades. An introductory note says: "Mr. Mehring concludes that: The weighted average grade of superphosphate has increased from 11 percent in 1880 to 19 percent in 1937. The combined tonnages of 10, 12 and 14 percent grades once constituted almost the entire consumption. Now these grades have practically disappeared from the market. The tonnage of the 16 percent grade is now decreasing while the tonnages of the 18, 20 and 32 percent grades and of various grades from 40 to 50 percent are increasing. The reason for these changes is that the higher grades are cheaper per unit of available P_2O_5 to the farmers."

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Vol. LXXIII, No. 4

Section 1

April
March 6, 1939

INTERSTATE TARIFF WALLS

President Roosevelt appealed yesterday for the destruction of interstate tariff walls, which, he said, threaten the nation with "social and economic problems even more serious than international tariffs." His appeal was addressed to Governor Robert L. Cochran of Nebraska, chairman of the National Conference on Interstate Trade Barriers, which opened a three-day meeting at Chicago yesterday. The conference, sponsored by the Council of State Governments, is being attended by representatives from more than thirty-five states, including eight governors. Its purpose is to break down existing trade barriers which have increasingly prohibited the free flow of goods and traffic between states in recent years. (New York Times.)

PRAISE FOOD SCRIP PLAN

The Department of Agriculture's plan to distribute surplus foods to WPA workers and people on relief by means of tickets redeemable in selected products is held in Washington to open the prospect of improved diet and better health for thousands of Americans now suffering from malnutrition, says a Science Service report. If the scheme works, Isador Lubin, Commissioner of the Bureau of Labor Statistics, said, it may change the eating habits of people who formerly could not afford to buy many foods and get them accustomed to eating foods which should have a beneficent effect on their health. Besides serving to distribute perishable commodities such as butter more efficiently, the plan is well worth trying from the point of view of improving health, a Public Health officer asserted.

FHA FINANCING HIGH RECORD

Home financing activities of the Federal Housing Administration in March set a new high monthly record, Administrator Stewart McDonald announced yesterday. Small home mortgages selected for appraisal in the month totaled \$121,689,493, of which approximately 66 percent represents homes to be constructed. The previous high, \$104,000,000, was recorded last August. McDonald also announced that the number of homes started under FHA inspection in March also set a new monthly record, exceeding the number at the peak of the building season last year, and averaging more than 2,500 during the month. (Press.)

Forestry
Outlook

An editorial comment in Southern Lumberman (April 1) says: "One of the most interesting and gratifying features of the recent annual convention of the Southern Pine Association at New Orleans was the address delivered by Mr. F. A. Silcox, chief of the United States Forest Service. The entire tone of his address was one of moderation and practical common sense. Its very title--'The Co-operative Approach Between Industry and Government in Forest Conservation'--was pleasing in its implications; for it is through the co-operative approach that effective conservation can be most effectively achieved...To an interested observer there seemed to be a ready and emphatic declaration of recognition of the basic importance of fire control as the physical foundation of any system of forest conservation; and, what was particularly pleasing, an expression of a determination to cooperate with the Department of Commerce and other governmental agencies in promoting the markets for forest products. On the whole, Mr. Silcox now seems inclined to the industrial rather than the social approach to the problem whose solution he so sincerely seeks; and this apparent inclination to a new point of view is a source of gratification to those who share his interest in conservation but have been following different paths in seeking the attainment of the goal. Above all, this prospect of a new outlook in forestry points the way to new responsibilities and new opportunities for the lumber industry...The lumbermen have urged the co-operative approach to the problem; Mr. Silcox now endorses that view. If they ignore the opportunity for co-operation, it may be construed by him as evidence that federal regulation is the only alternative. The next move seems to be up to the organized lumber industry."

Rural and
Urban Women

Rural America (March) contains addresses given at the 4th National Rural Home Conference, one of which is "The Interdependence of Rural and Urban Women", given by Carl C. Taylor, Bureau of Agricultural Economics. He says in part: "The great bulk of the city and town populations of the Nation are either country-born people, the sons and daughters of country-born people, or the grandchildren of country-born people. Most of our great cities have become great in population during the last 50 years. The natural increase in the great cities now fails, and apparently has failed for a number of decades, to furnish enough children to replace the population lost by death. This means that the great increases in population have come from outside of the city, mostly from the rural areas of America. Certain definite data are not available except for 1920 and 1930 on the magnitude of this cityward migration, but it is known that of the 28,000,000 women 15 years of age and over who lived in cities in 1930, about 3,000,000 had moved in from the country since 1920. In other words, of all of the women in this age group living in American cities, about one-ninth of them had come from the country in

(Rural and Urban Women - continued)

a single decade. If we knew the exact statistics and could add to this one-ninth all of the women now living in cities who had moved there from the country before 1920, we would undoubtedly double or treble the number. And if we were to add to those who were country-born, those whose parents were country-born, we would undoubtedly discover that more than one-half of American town and city women were either born in the country or were the children of parents who were born in the country. This is a fact of great significance, for country ideals and the appreciation of and probably the belief in country habits, attitudes, and institutions linger long and deep in the lives of these people."

50th Texas

Experiment

Station Report

"The fiftieth annual report of the Texas Agricultural Experiment Station contains evidence that the agency's work affects the economic life of the State as a whole", Booth Mooney explains in his article,

"Experiment Station Hunts for Facts" in the Texas Weekly (April 1).

He says in part: "The story of the research workers' activities is told simply, but that does not mean their work is simple...A fascinatingly wide range of subjects is covered in the Experiment Station's report. Virtually everything--every factual thing--that affects agriculture comes in for attention. Farmers certainly are concerned by the circumstance that some important species of Texas wildlife have been so greatly reduced that they are likely to become extinct unless preventive action is taken in the near future. In the section on agricultural engineering, particular attention is given to the mechanical harvesting of cotton, with this statement standing out significantly: 'At Lubbock in harvesting thirteen varieties of cotton yielding an average of a bale to an acre....an average of 98.8 percent of the cotton on the plants was removed by the stripper.' More about cotton is contained in the entomology section of the report, in which are given results of experiments with sulphur as an insecticide to control flea hoppers. Highly valuable are the detailed reports of work done at the various substations of the Experiment Station system...Recognition of the value of the Experiment Station's activities probably is not as widespread as it should be. The reason for that, perhaps, is that the agency's competent staff of research workers spend no time in courting publicity. They want their findings to become known in order that the farmers of Texas will benefit from them...The Experiment Station's purpose is to engage in a steady, relentless pursuit of facts--facts that will help to make farming less of a gamble and more of a business. The Fiftieth Annual Report shows how steadfastly the Station holds to that purpose."

Map for

Fertilizer

Farmers of the future should study cartography if they want to save money on fertilizer, according to Dr. F.C. Bauer of the Illinois Experiment Station. Instead

of setting his manure spreader at 10 tons per acre or his limestone drill at 2 tons, he makes a map of each field, which shows where the ground is low, medium or high in soil fertility and adjusts his spreaders accordingly. Thus costly plant food is applied only on low-fertility patches of ground. (Country Home Magazine, April.)

Senate, Mr. Connally submitted an amendment which he intends
April 4 to propose to H.R. 5269, agricultural appropriation bill
for 1940, to provide an additional \$60,000,000 for purchase
and distribution of surplus agricultural commodities.

The Committee on Education and Labor reported without amendment
S. 835, to provide compensation for disability or death resulting from
injury to employees of contractors on public buildings and works (S.Rept.
249).

Adjourned until April 6.

House, Received from the Secretary of Agriculture the annual
April 4 report on agricultural experiment stations for 1938; to Com.
on Agriculture.

(Prepared by Office of Budget and Finance)

Pellagra A Science Service report on work on pellagra by Dr.
Control Tom Douglas Spies, of the University of Cincinnati and the
Hillman Hospital, Birmingham, says he and his associates
found that in a study of the diets of 50 pellagra patients in almost
every case the patients had not been getting enough calories, proteins,
lime salts, iron and vitamins. In other words, they had not been getting
enough meat, milk, eggs and fresh fruits and vegetables. People living
on such diets get not only pellagra but other ailments, such as beriberi.
Nicotinic acid will cure the pellagra but to cure the other conditions
certain other chemicals, the new synthetic vitamin B and flavin, are need-
ed. Since both these and nicotinic acid can be obtained from food, Dr.
Spies and other nutrition authorities urge the importance of a good diet
for pellagra prevention. While the ailment is most common in poverty
stricken people, it also occurs in persons who follow an inadequate diet
because of illness, chronic alcoholism or addiction to diet fads. New
knowledge of how nicotinic acid cures pellagra by its effect on the body's
chemistry was also reported by Dr. Spies. The chemical achieves its cura-
tive effect, at least in part, Dr. Spies had discovered, through its ef-
fect on one of the body's enzymes or ferments, codehydrogenase.

Sheep C. K., in Successful Farming (April) says that about
Culling 20 years ago Dean J. A. Hill of the Wyoming Experiment
Station began sheep flock culling for increased fleece
weight. "Through selection of the best-fleeced ewes, mated with good
bucks, average fleece weight has been increased from 2 to 4 pounds in
from 4 to 10 years in range flocks. A livestock company of Cheyenne
has realized an increase of more than 80,000 pounds per clip on its
40,000 head of range ewes. Almost as important as the weight increase
per fleece has been the greater uniformity in grade and the longer staple,
factors making for better prices for the clip...On an average, a 1 1/2
pound difference in fleece weight between the ewes retained and those dis-
carded can be expected from the initial culling..."

DAILY DIGEST

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Vol. LXXIII, No. 5

Section 1

April 7, 1939

SURPLUS FARM PRODUCTS "Without waiting for an "all-farm bloc" conference of Senators, tentatively arranged for Saturday, three midwesterners yesterday introduced an amendment which would add \$150,000,000 to the pending Agriculture Department appropriation bill; to be used for disposing of surpluses in farm products not covered by the benefits of the soil conservation program," reports Turner Catledge in the New York Times. "...The proposal, by Senators Lucas of Illinois, La Follette of Wisconsin and Clark of Missouri, would add \$150,000,000 to a sum of \$90,000,000 already included in the bill for use in disposing of surpluses of dairy products, poultry, livestock, fruits and vegetables. Under its terms not more than 25 percent of the total of \$240,000,000 would be allocated to any one commodity..."

STATE TARIFFS Trade barriers, through the erection of localized tariff walls by which individual states seek to raise additional funds for government, are rapidly transforming the United States into forty-eight separate "Balkan Kingdoms" and thereby blocking free commerce, Governor Lloyd C. Stark of Missouri warned delegates to the National Conference on Interstate Barriers yesterday. (New York Times.)

ICC RATE CONTROL Representatives of shippers and water carriers told the Senate Interstate Commerce Committee yesterday that Federal regulation of water carriers would increase the nation's transportation bill. They appeared before the committee to protest proposed legislation which would give the Interstate Commerce Commission authority to fix rates and otherwise regulate transportation by water as well as railroads and trucks. (A.P.).

VAPOR PROCESS "A new process which, it is hoped, makes possible the production of a new type of commercial synthetic rubber and of a host of other derivatives that may be of value as drugs, dyes, plastics and countless other products beneficial to man, was reported yesterday to the American Chemical Society," says William L. Laurence in the New York Times. "The new process, which represents ten years of steady research in subjects related to the industrial fields of dyes, plastics and synthetic rubber, was described in a report by Dr. George D. Palmer, Jr., S. J. Lloyd, W. P. McLure, Norman Lemaistre, S. Waring and L. W. Bachman, all of the University of Alabama... The process treats elements such as sulphur with the vapors of various simple and cheap organic compounds..."

Perennial
Grasses
Decrease

J. E. Weaver and F. W. Albertson, both of the University of Nebraska, writing on "Major Changes in Grassland as a Result of Continued Drought", in the Botanical Gazette (March), say in part: "Among the most striking effects of the drought is the very great depletion of the formerly most important regional dominant, little bluestem (*Andropogon scoparius*). In numerous prairies not a trace remains; in others small amounts persisted, usually only in the most favorably moist habitats. This loss has been general in true prairie of the southern half of Nebraska. In Iowa this grass has generally persisted but sometimes with a shifting in importance from first to third place, being outranked by *Sporobolus heterolepis* and *Andropogon furcatus*. Since this species alone frequently occupied 50 to more than 70 percent of the total basal cover on uplands, its death has left open great areas for invasion. The loss of Indian grass (*Sorghastrum nutans*) has been similar to that of little bluestem. Its nearly complete disappearance is much less noticeable, however, since it formerly constituted only about 2 percent of the basal cover of vegetation. The death of Kentucky bluegrass (*Poa pratensis*) has been general in pastures, where it often had nearly complete control, but was somewhat less in prairie because of the shade afforded by mid grasses and forbs. While many prairie areas (especially westward) are practically free of this invader, which normally furnished 5 to 9 percent of the basal cover on uplands and lowlands respectively, in others it occurs commonly in ravines and at the bases of north slopes. During the favorable season of 1938, these relict patches produced a fine crop of seed and also spread rapidly vegetatively."

This publication also contains an article on the application of indoleacetic acid to bean cuttings by John W. Mitchell, and Neil W. Stuart, Associate Physiologists, at Beltsville; and one on the effect of photoperiod on the development and metabolism of soybeans, by M. W. Parker, Associate Physiologist, and H. A. Borthwick, Morphologist, Beltsville.

Surplus
Grapefruit
for Juice

The Federal Surplus Commodities Corporation has been authorized to buy surplus grapefruit for processing into canned grapefruit juice, the Department announces. This program will be carried out as part of the general plan to remove excessive supplies of citrus fruit from commercial channels. It will supplement the grapefruit program, announced last December, under which the grapefruit bought by the Corporation is distributed as fruit. So far this season the Corporation has bought 797,000 boxes of grapefruit in Texas, Florida, California, and Arizona. This has been given to state welfare agencies for distribution to families on relief rolls.

Grass on
the Farm

"In all too many parts of the country, grass (grass and legume mixtures as in pastures and meadows) is relegated to the poorer parts of the farm," says an editorial in Better Crops with Plant Food (March). "The term 'back pasture' indicates where pastures belong in the popular concept of growing grass... This point of view is changing... The newer viewpoint has been admirably expressed by P. V. Cordon of the U. S. Department of Agriculture in a paper entitled, 'The Place of Grass in an Erosion-Control Program'... At the outset the author pointed out that the title assigned him was somewhat narrow and incidental to the grass problem. The real trend should be toward a grassland agriculture and soil conservation and erosion control should be natural results of such culture... A sound grassland philosophy, suggested by the author, would take account of at least the following: (1) The inclusion of grass in cropping systems as grass and not as an expedient—grass planted in rotation because farmers appreciate its intrinsic value. (2) The conviction on the part of farmers that grass is economically feasible not only as a source of feed for livestock, but as a soil-improving crop to be reflected in the returns from other crops. (3) The alignment of all research, educational, and action agencies to view grass culture broadly and with respect to its place in farm practice within wide areas. Not only would the author emphasize such work and thinking among soil and crop specialists, but would also include the animal husbandman, the nutritionist, the economist, and other groups interested. He would include county planning boards and conservation districts from which would come both thought and action by farmers and business men alike. This paper by P. V. Cordon merits the close attention of many different groups of agricultural workers. It is undoubtedly true that our experimental and research work in reference to pastures and grassland generally has much of the incidental nature in its concept and technique. It needs to be correlated and related to a broad and sound program of grassland agriculture."

County
Extension
Agents

The April number of Successful Farming contains a survey on county extension agents, one of a series, The Farmer Speaks, reflecting national opinion of farm men and women.

The men's opinions are: "A substantial vote of confidence in their county agent is registered by farm men... Over three quarters of the farmers throughout the nation are 'acquainted' with their county agent; and among each 100 who know him, 44 say he's helped them 'a great deal,' 39 'a little,' and only 17 'not at all.'... The county agent gets his greatest acclaim from the well-to-do farmers, half of whom vote he helps them a 'great deal.' The younger farmers give the county agent a slightly warmer reception than those who are over 50 years of age. But half of those who believe their county agent has been of no help admit

(County Extension Agents--continued)

they have never requested his help, and only a minority believe their methods superior...."

The women's opinions are: "While only half the farm women are familiar with their county home demonstration agents, the agents receive an even greater vote of confidence from farm women than county agents receive from farm men...Fifty-five out of each 100 farm women who know their home demonstration agents say, 'They have helped a great deal.' The 32 who say 'a little'; and the 13 who say 'not at all,' put the blame on themselves, not their home demonstration agents...Why are only half of the farm women acquainted with the home demonstration agents in their counties? Because 'it's too far to go,' says a Geneva County, Alabama, farm woman. 'I can't take the children to the meetings' is the reason advanced by a Davis County, Iowa, woman. Give farm women more time and better transportation, and home demonstration agents can expect to find their meetings crowded to capacity..."

House, Messrs. Doughton, Cullen, McCormack, Cooper, Tread-
April 5 way and Knutson were appointed House conferees on H.R.
3790, taxation of compensation of public officers and
employees.

The Committee on Agriculture reported without amendment H.J.Res. 258, to amend section 8 (f) of the Soil Conservation and Domestic Allotment Act (H.Rept. 381).

The Senate was not in session.

(Prepared by Office of Budget and Finance.)

State "State planning boards are now in existence in 45
Planning states and the District of Columbia, Hawaii and Alaska and
the remarkable growth of state planning since 1933 is one
of the outstanding developments of recent years," says an editorial in Better Crops With Plant Food. "A report by the National Resources Committee entitled 'The Future of State Planning' (obtainable through the Government Printing Office, price 25 cents) points out: 'The work of state planning boards consists of the laying out of interrelated, long-range programs leading to the conservation and most beneficial use of the resources of the state. The process of planning involves the analysis of emerging problems and the projection of a comprehensive program of action correlating the planning programs of state agencies. It is essential that state plans be related to local and federal plans. The prosecution of related programs by the different levels of government affecting the same people in the same areas creates a serious need for collaboration among the agencies concerned in the planning of their activities.' The report discusses the subject of the future of state planning from four broad points of view, namely, the development and present status of state planning, functions and opportunities of state planning boards, the position of the planning board in the governmental structure, and relationships of the National Resources Committee and state planning boards. The report also gives recommendations for the future and contains a useful directory of members of the state planning boards and a bibliography of publications. Agricultural workers can well use this report."

DAILY DIGEST

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Vol. LXXIII, No. 6

Section 1

April 10, 1939

WINTER WHEAT PROSPECTS

"The erstwhile dust bowl of the southern high plains has taken a commanding lead in winter wheat prospects as the crop enters the critical spring months preceding the midsummer harvest," reports John M. Collins in the New York Times. "On the basis of present outlook, the best wheat to be found in the winter wheat belt is in southwestern Kansas, eastern Colorado, western Oklahoma and the Texas panhandle as far south as Amarillo. Due to a combination of favorable moisture conditions and a large acreage in summer fallow as the result of the crop rotation and wind erosion program of government agencies, crop prospects are better at this time in the old dust bowl area than they have been since 1931..."

COMMODITY YEAR BOOK

Despite the inherent difficulties, further attempts at the restriction of commodity production will be made, according to an analysis of the trend of international control of commodity production contained in the Commodity Year Book 1939. Published last week by the Commodity Research Bureau, Inc., the book asserts that restrictive schemes are increasing partly by reason of the dislocation of supply and demand resulting from the World War, partly because of governmental efforts, particularly in Europe, to achieve economic self-sufficiency and for military purposes. (Press.)

BOTANIC EXHIBIT

A new flower show has been opened in the exhibition conservatory of the Botanic Garden (Washington). The feature attraction is one of the finest collections of indoor rhododendrons in the country. There are more than 40 large tubs of these bushy specimens, covered with various shades of lavender blooms and standing from 10 to 20 feet high. They are used as a background for a freshened display of all spring flowers. There is also exhibited a new collection of gardenias in tubs, with 12 to 30 blooms each. (Washington Star.)

World Milk Record

Cherry, an 8-year-old shorthorn cow, set in England recently a new world's record for a year's milk production, 41,644 1/2 pounds, or an average of 57 quarts a day, says an Associated Press report. The record was announced by the American Shorthorn Breeders Association. Carnation Ormsby Butter King, an American Holstein-Friesian, was the previous record holder, with a production of 38,606 pounds.

Arkansas Land Law Arkansas has recently enacted a new land policy law which may solve the problem of handling land which has reverted to the state through tax delinquency and abandonment. The law authorizes the state land commissioner to conduct investigations regarding the best usage for the 2,000,000 acres of state-owned land. After an appraisal of the land is made the commissioner will determine if it is suitable for agriculture or should be used for parks or forests. Suitable land for agriculture may be developed by the state in cooperation with the federal government and this land may be returned in small tracts to farm families through sale or outright grants under state "donation" law, the American Society of Planning Officials reports. The purpose of the law is to eliminate dumping on the market of unproductive land which soon becomes tax delinquent and reverts to the state. Also it is intended to prevent "dollar-an-acre" sales of state land which later may be more valuable for public use. While the use of state land is of major importance in Arkansas, which owns one out of every 16 acres in the state, the problem has also challenged the attention of many other states, including California, Oregon, South Dakota and New Jersey. (Wall Street Journal.)

Phone "Voice" Gives Weather The New York Times reports that New Yorkers may now dial a number and hear the latest weather forecast spoken over the wire by a special voice-recording and reproducing machine of the telephone company. The number that will bring information as to whether it will be clear or cloudy, rainy, warmer or cooler, is WEather 6-1212. As soon as the recorded weather message, of about thirty words, is played back and approved for clarity, the machine will be switched into service to "speak" to anyone who phones. Three machines will be in continuous or semi-continuous operation to assure callers of information at all hours. Automatic relays and other equipment insure that the information will always be available, for one machine can feed the central weather lines with service for 150 simultaneous calls, or 30,000 calls a day. Each instrument speaks the weather message in about 25 seconds. After a pause, the report is repeated. Thus a caller may hear a report several times to fix the information in mind. Dr. James H. Kimball, veteran meteorologist of the New York Weather Bureau, who was present at the test, said the device should relieve his office of much of the burden of answering the constantly increasing number of weather calls, which often number more than 1,000 a day in bad weather, keeping four or five men busy.

Laboratories The Department announces that plans and specifications for the construction of the four regional research laboratories authorized by Congress are now available to prospective bidders.

Frozen Food Container Designed to augment frozen food distribution and widen markets from the Puyallup Valley region of Washington, a new style portable container for less than carload lots which will keep distributors supplied with fruits or vegetables when they run short, has been developed by the Washington Packers. This Puyallup Valley plant froze 9,750,000 pounds of foods, or one quarter of the entire pack, last year. The new container keeps the frozen food contents at a temperature of 40 degrees below zero all the way across the continent. Carrying 100 pounds of dry ice it contained 300 pounds of frozen foods when sent from Puyallup to Kansas City by express. (Quick Frozen Foods, Mar.)

Nittany Turkey Paul H. Margolf, Pennsylvania State College, in Everybody's Poultry Magazine (April) reports that the college, about ten years ago, began propagation work with the Pennsylvania wild turkey. "It responded well to the confinement method of turkey production and each year the progeny became more domesticated in habits," he says. "We have now developed a small turkey (Nittany) for family use. The temperament of the Nittany compared to the Bronze in the turkey realm is as that of the Leghorn compared to the Plymouth Rock in the chicken world. Future work will be with larger numbers of the Nittany emphasizing selection for shorter shanks and less ranginess in appearance...The 14-pound Nittany tom is a popular size for family use...Because of the well-rounded, thick meated breast, the Nittany hen when dressed for market presents an attractive appearance. Nittany toms not only have the appearance of a compact well meated carcass, but supply at the holidays the oft requested 11 to 12 pound dressed turkey...The Nittany tom will mature for market in less time than the Bronzetom..."

E.S. Worker Honored The Government of Latvia, in connection with the twentieth celebration of the independence of the country, conferred its highest civil order, the Order of the Three Stars, on Gertrude L. Warren, of the Extension Service, for "valuable service rendered in fostering friendly relations between Latvia and the United States, particularly in the field of 4-H Club work." (Journal of Home Economics, April.)

Nutritional Value of Frozen Foods William B. Esselen, Jr., writing in Quick Frozen Foods (March) on "Nutritional Values of Quick Frozen Foods" says in part: "Quick freezing and subsequent cold storage do not cause any considerable loss of the carbohydrate, protein, fat and mineral contents of fruits and vegetables. Thawing, however, is accompanied by leakage in which some of the soluble nutrients may be lost. In the case of fruits, if the juices leaking out are eaten, there will be little loss of these components during thawing. With vegetables this loss of soluble nutrients due to thawing may be avoided by cooking the still frozen vegetable in a very small amount of water and serving the cooking water with the cooked vegetable." (Mr. Esselen is with the Nutrition Laboratory, Massachusetts State College.)

Senate,
Apr. 7

The Committee on Appropriations reported with amendments H.R. 5219, the second deficiency bill for 1939 (S.Rept. 257). As reported, this bill contains the following items for this Department: fighting forest fires, \$2,480,000; authorizing \$60,000 of \$5,000,000 hurricane damage appropriation to be used in New York; enforcement of the federal food, drug and cosmetic act, \$15,000; international production control committees, increase from \$17,500 to \$25,500 (to be paid from AAA funds); administration of sugar act of 1937, \$5,000,000; Dutch elm disease eradication, \$100,000.

The House was not in session; next meeting April 10.

(Prepared by Office of Budget and Finance.)

Cotton

A New Orleans report by the Associated Press says:

Acreage

Cotton planters in all Southern States except South Carolina

Under AAA

intend to cultivate the full acreage allotted under the farm laws, a survey of the area revealed a few days ago.

Reports from State Departments of Agriculture, Extension Agencies, County Agents, and representatives of the Agricultural Adjustment Administration said approximately 88 percent of the allotment to South Carolina would be used in that state. The same authorities said weather conditions the last few weeks were not conducive for field work but that farmers in general were hoping for a few days of sunshiny weather in order to get their 1939 crops on the way. Will Rogers of the AAA office at North Carolina State College said farmers would plant approximately 88 percent of the State's 997,252 acres allotted, and added: "If it were not for the fact that farmers must plant at least 80 percent of their allotment to receive maximum benefits under the AAA program, many growers would not plant a stalk of cotton this year." The official allotment for the cotton region, released last December by the Department of Agriculture, was 27,500,000 acres, compared with a harvested acreage in 1938 of 25,346,000 acres, which produced 12,008,000 bales.

Free Trade

Representatives of 44 states and four territories

Among States

last week approved a broad program for the restoration of free trade among the states. They requested the Council of State Governments, sponsor of the 3-day conference, to take these steps: To discourage the adoption of any retaliatory legislation by states "which feel themselves aggrieved by the legislation of their neighbors"; to encourage the repeal of trade-barrier legislation already adopted; to foster the enactment of uniform laws and the adoption of reciprocal agreements designed to reduce trade barriers between the states; to cooperate with the various commissions on interstate cooperation in calling regional hearings to carry out the recommendations of the conference.

AAA Loans for

The Agricultural Adjustment Administration announces

Naval Stores

that loans not to exceed \$18,000,000 will be available to producers of gum naval stores in 1939. The loan, which

will be administered by the Commodity Credit Corporation in accordance with provisions of the Agricultural Adjustment Administration Act of 1938, is intended to supplement the naval stores conservation program and assist in stabilizing the market during the season of heaviest production.

DAILY DIGEST

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Vol. LXXIII, No. 7

Section 1

April 11, 1939

FARM SURPLUS EXCHANGE

"A direct offer to exchange 2,000,000 or more bales of surplus cotton and up to 100,000,000 bushels of carry-over wheat for large supplies of rubber and tin is to be made soon by the government of the United States to England, Holland, Belgium and perhaps other countries," reports Turner Catledge in the New York Times. "This was disclosed yesterday by Senator Byrnes of South Carolina, and largely confirmed by Secretary Hull, following a series of conferences between the Senator and State and Agriculture Department officials extending over several weeks. The plan is in line with two programs of the Administration and Congress; first, to move the burdensome surpluses of farm products now stored in the United States, and, second, to gather within these shores an ample quantity of 'strategic materials,' not adequately furnished by American production, against the growing possibility of a major war. Soon after Senator Byrnes announced the plan Secretary Hull issued a statement endorsing the objectives. The proposed 'barter' deals, he asserted, would in no wise run counter to his trade agreements program 'or to any of our other general policies'..."

SALARY TAX BILL PASSED

The House passed and sent to the White House yesterday the bill calling for imposition of the federal income tax on state employees, and eliminating the retroactive provisions of taxation laws in so far as they apply to state officials taxable under a recent United States Supreme Court decision. It was estimated that under the measure about \$17,000,000 a year would be added to federal revenues. (Press.)

WINTER WHEAT ESTIMATE

The indicated 1939 production of winter wheat is 549,219,000 bushels based on April 1 reports, according to the Crop Reporting Board. The winter wheat crop in 1938 was 686,637,000 bushels and the 10-year (1928-37) average was 560,160,000 bushels. The April 1 indicated production represents an increase of 64,000,000 bushels above expectations last December and results from a rather general improvement in prospects since December 1. April 1 reports indicate that about 16 percent of last fall's seeded acreage will not be harvested. This leaves about 38,900,000 acres for harvest in 1939, compared with 49,711,000 acres harvested last year and the average of 38,160,000 acres during the previous 10 years. A yield of 11.9 bushels on the acreage seeded to winter wheat last fall is indicated by present prospects.

Senate, Mr. Frazier inserted in the Record a letter from Sec-
Apr. 8 retary Wallace to Senator Smith, opposing S. 570, the cost
 of production bill.

Received from the Farm Credit Administration a report with respect to deficiency judgments obtained by the federal land banks and Federal Farm Mortgage Corporation in connection with loans made upon security of real property, in response to S.Res. 89; ref. to Com. on Banking and Currency.

Recessed until April 10.

The House was not in session.

(Prepared by Office of Budget and Finance.)

Southern A seven-point program in regional planning for the
Planning South was advanced recently by George B. Galloway, field
 representative of the National Economic and Social Planning
Association. The seven steps were: Repeal of the poll tax; creation of a southern council for regional development as advocated by Dr. Howard W. Odum, sociologist; increase of federal aid in educational, recreational and health facilities to equalize social services between the South and other regions; compensation to the South for tariff and freight rate discriminations; further extension of measures for conservation of physical resources that are on the agenda of state planning boards; removal of "high cost farmers" from the land and their employment in rehabilitating the soil; development of large-scale cooperative and collective farming under efficient management.

Gum Timber That black and red gum timber of the southern wood-
for Pulp lands will play a very important future role in the manu-
 facture of high grade papers, such as book and bond, is
predicted by Dr. Charles H. Carpenter, technical director of the Herty Foundation laboratory. Those woods, he revealed, pulp more readily than pine and also bleach more readily. On the paper machine they handle well, giving tightly closed sheets. Dr. Carpenter said it was possible to use the gum pulp for grades of papers such as book and bond without addition of any long-fibered pine or spruce. This addition, he said, is usually necessary when using other hardwoods than gum. "In the possible future development of the southern pulp industry into grades other than brown wrapping and fiber container board it is believed that these hardwoods will play a very important role," Dr. Carpenter said. (Atlanta Constitution, March 30.)

Color of "Very dark yolks can be obtained by turning the hens
Egg Yolks on alfalfa range, according to the Iowa Experiment Station,"
 says R. L. Cochran in the Country Home Magazine (April).
"Very light yolks are produced when the birds are fed a ration containing 40 percent yellow corn and 10 percent alfalfa meal. An intermediate yellow is obtained by increasing the alfalfa meal to 20 percent. When one-half percent of codliver oil, rather than alfalfa, is fed as a source of vitamin A, the yolk color is considerably lighter."

Veal Calves in Transit Many years ago, when legislation governing the interstate movement of livestock was pending, we suggested that veal calves should not be allowed to go from one market to another but should be slaughtered at the first central market at which they arrived. No attention was paid to this suggestion and the cruelty of shipping these calves, which cannot eat or drink, has continued. Now a better plan is being tried, the feeding of calves in transit evaporated or powdered milk liquefied at body temperature, using nipples devised for this purpose. The calves go through in better condition when so fed and the veal is not only more attractive but more wholesome. (Penn. Farmer, Apr. 8)

Potato Seed Treatment "Yellow oxide of mercury is a new seed treatment being recommended to potato growers by the Minnesota Experiment Station," says W.J.H., in Successful Farming (April). "Used by a number of producers in North Dakota and Minnesota against rhizoctonia, it has a cost of 1 1/2 cents a bushel of seed treated. It is not injurious to seed dormant, sprouted or cut. Similar findings have been recorded in New York. The treatment is instantaneous and the mixture does not weaken with use. Of six rhizoctinia remedies, yellow oxide of mercury is recommended by the Minnesota station as the only one entirely safe on cut seed. Five pounds of a 20 percent yellow oxide mercury mixture are used with 30 gallons of water. This should be stirred frequently because the treating agent does not go into solution but instead is in suspension in the water."

South Dakota Tree Planting The April 8 issue of Dakota Farmer says editorially: "No one interested in trees can afford to miss reading the article in this issue, 'Accomplishments to Date and Future Plans of the Prairie States Forestry Project in South Dakota' by A. L. Ford, state director (Forest Service). This great venture has proven to be remarkably successful--and much of this success can be credited to the Forest Service and its personnel. The most valuable portion of Mr. Ford's article is a list of 'some of the things we have found that have an important bearing on success or failure' (in tree planting)."

Grazing Experiment "In a grazing experiment carried on with steers at Sni-a-Bar farms by the Department of Agriculture and the Missouri Experiment Station, it was found that rotation grazing of bluegrass pasture, supplemented in midsummer with Korean lespedeza pasture, produced an average of 107.9 pounds of gain per acre," says C. D. Lowe, of the Department, in April Country Gentleman, "while unsupplemented pasture, when grazed in rotation, produced only 71.8 pounds, and when continuously grazed, only 64.2 pounds. The average gain per head was 70.6 percent more on the bluegrass with lespedeza supplement than on the other two pastures."

Waterfowl For the first time in 10 years the waterfowl outlook in Canada shows improvement, according to the chief migratory bird officers of the Department of Mines and Resources, Ottawa. Increases were noted in green-winged teal, blue-winged teal, shoveler, canvasback and bufflehead. Young ducks of all species appeared to be above normal in survival. (Press.)

I. C. Jagger

The April 1 issue of the Market Growers Journal contains an obituary of Ivan Claude Jagger (formerly of the Bureau of Plant Industry) by Paul Work, of the New York Experiment Station and editor of the Journal. It says in part: "With the passing of Ivan Claude Jagger the vegetable industry lost one of its foremost plant breeders. Responsible for many of our most valuable strains of New York or Wonderful lettuce and for the Mildew Resistant 45 muskmelons, he made invaluable contributions...He adapted the formaldehyde drip method of control to muck land conditions. He first isolated and identified the organism which causes the bacterial blight of celery. This was the first bacterial disease to be controlled directly by spray."

Chemical

Research

An editorial in the Washington Star (April 9) comments on chemists and says "the general public hears little of their activities, compared with those of physicians or attorneys," and adds: "In the laboratories of the Department of Agriculture they are finding out how to cheapen living in scores of ways.....

.....At the National Institute of Health they are determining the chemistry of cancer, making non-habit-forming narcotics, preparing remedies for many maladies which now kill men. At the Bureau of Standards they are tearing gasoline to bits and reshaping them into the more powerful motor fuels of the future, extracting isotopes of hydrogen and oxygen out of air and water, finding new and rare sugars, lighter and better building materials, stronger and cheaper textiles. At the Geological Survey they are finding out about the past of the earth, its age in eons, the hidden wealth of the eternal hills. And at the various universities they are carrying on research in all these fields. Perhaps a generation will pass before some of their work becomes of immediate concern to the man on the street. In the long run, however, it may be of more concern than that of any other single group..."

FSA Low-Cost

Housing

Business Week (April 8) contains an item, with four photographs, of the Farm Security Administration low-cost housing project in Missouri. "In New Madrid, Missouri," it says, "the Farm Security Administration is building 4 and 5 room frame houses (without baths) costing \$930 and \$1,105 each, including overhead. The low cost is ascribed to an assembly line technique. A prefabrication plant is set up at a railway siding near the project. Panels, doors and windows are cut there by small power saws, assembled and hauled by truck to the site, where it takes about 50 hours to put up each house. Labor has consisted mainly of unskilled farmers, who are paid prevailing wage rates. Contractors, bidding for contracts to erect similar groups of houses under the Bankhead-Jones act, are reported by FSA to have handled such jobs--using FSA prefabrication methods--at a profit, for \$1,165. Such operations are now getting under way in Arkansas, Mississippi, Alabama, Georgia and Missouri."

DAILY DIGEST

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Vol. LXXIII, No. 8

Section 1

April 12, 1939

WHEAT PREMIUM PAYMENTS

The deadline for payment of premiums on 1939 "all risk" crop insurance has been set at April 29 by the Federal Crop Insurance Corporation. The only exception to the deadline, according to Leroy K. Smith, manager, will be in the case of spring wheat growers whose notices of the premium due expired after the official closing date. In such cases, he added, the expiration date stated in the premium notice governs the final date on which the premium may be paid. In other cases the closing date applies to receipts of premiums at county AAA offices. With completion of spring wheat payments the wheat crop insurance program, which began last summer, will have completed the first insurance of a wheat crop on a national basis. To date about 127,000 wheat growers in 30 states have paid for policies, of which 107,912 are in winter wheat states. (Press.)

BAE WOOL OUTLOOK

The new wool clip is starting to market under more favorable conditions than existed at this time last year, the Bureau of Agricultural Economics says in its April report on the wool situation. Favorable factors include a smaller carryover than was reported for April 1 last year, extension of the federal wool loan program to the 1939 clip, prospects for a much higher rate of mill consumption through the first half of 1939 than in 1938, and the recent firmness of wool prices in foreign markets. Prospects for a stronger consumer demand this year than last and relatively small stocks of manufactured wool products in trade channels indicate a fairly well maintained domestic mill consumption in 1939, the bureau said.

ARGENTINE TRADE POLICY

Argentina is wholeheartedly behind the Hull reciprocal trade policies, despite that country's bilateral trade agreements with England, Germany and others, John Abbink, president of Business Publishers International Corporation, told 300 export executives yesterday. Reporting on what he had learned from Argentine business men and officials on a recent trip to Buenos Aires, Mr. Abbink said Argentina finds it impossible to adopt the 100 percent multilateral trade policies of Secretary of State Hull, but is willing to give the United States everything it wants if trade agreement negotiations are started. (New York Times.)

Government Tree Planting The Federal Government and land owners of the Plains States are now in the midst of the biggest tree planting season since the idea was advanced by President Roosevelt nearly five years ago, says a report in the Baltimore Sun (April 12). During the present season, which will taper off toward the end of May in North Dakota near the Canadian border, the Government expects to set out 48,-000,000 trees. A total of 84,600,000 were planted from the spring of 1935 to the end of the spring planting season in 1938. Thus the current plantings would bring the total to 132,600,000 trees. The planting is in relation to the needs of individual farms and the cooperation of individual land owners. Only a small percentage of the acreage of each farm is planted. The primary objective is to reduce the destructive effect of the winds and to facilitate farming operations, rather than to create a forest on the plains.

Industrial Use of Farm Products Scientific study of new uses for farm products has led to important industrial developments, but in comparison to the need and the opportunities the surface has barely been scratched, according to a report submitted to Congress by the Department. Prepared by a committee headed by H. T. Herrick, Assistant Chief of the Bureau of Chemistry and Soils, the report surveys present scientific activities in this field and outlines research for the four Regional Research Laboratories. Upwards of 1,300 laboratories throughout the United States were visited by investigators to obtain material for the survey. Developments in rayon, plastics, insulating board, motor fuels, and new paints, varnishes and lacquers, are the forerunners of many possible new industries, the survey revealed. Rapid growth of new industrial uses of farm products, however, may be only possible on the basis of an extended knowledge of the biology, chemistry, physics, engineering and economics of even the commonest and oldest of farm products. The first part of the report, which is divided into three sections, explains the basis on which the Department determined the four regions into which the work is divided. It explains how the locations were chosen and specifies the farm commodities which are to receive first attention. Part 2 of the report contains sections in 74 farm commodities, besides several on common constituents like starch, sugars, protein and cellulose, and others on processes like fermentation, or on uses like motor fuel..... The third part of the report is a comprehensive research program to further the industrial utilization of surplus agricultural materials.

Stock Disease Control Further health protection for domestic animals of the United States, already closely guarded in this respect, is provided by a new regulation of the Department. Designated as Amendment 14 to Bureau of Animal Industry Order 276, the new provision requires a special permit for importing cultures or collections of organisms or viruses and for transporting them from state to state. It required a special permit also for the similar handling of the experimental animals treated or inoculated with such materials.

House, The Committee on Interstate and Foreign Commerce re-
Apr. 10 ported with amendment H.R. 5412, to encourage travel in
 the United States (H.Rept. 395). This bill sets up a Na-
tional Travel Board, a member of which is to be from this Department.

The Senate adjourned almost immediately after convening.

(Prepared by Office of Budget and Finance.)

Stationary F. H. Ballou, Ohio Experiment Station, in Ohio Farmer
Spraying (April 8) describes a stationary spraying plant at the sta-
Equipment tion. "Such equipment is simple, practical, dependable and
 long-lived," he says. "Heavy trucks are wholly eliminated.
Teams and tractors have no occasion to enter the orchards during the en-
tire spraying period. The vegetative soil covering of the orchard areas
is neither destroyed nor injured in the slightest degree. Yet, upon every
hand, the wholesome effects of proper sprays applied by powerful spraying
equipment are clearly apparent. It is little wonder that owners of or-
chards situated on level or nearly level land, as well as those who grow
fruits on steep, rough ground, become deeply interested in stationary spray
equipment. Two of the outstanding advantages of properly installed sta-
tionary spraying machinery which contribute largely to its long life of
splendid service are that at all times it is securely sheltered from in-
jurious weather conditions and never subjected to racking strains and
shocks as are portable spraying units...The main orchard pipeline alone
at our plant has the capacity of 200 gallons of spray mixture before be-
ginning to build up pressure by filling the lateral lines of lesser size..."

Products By adding hydrogen to lignin, scientists of the
From Lignin Forest Products Laboratory have learned how to convert this
 waste product of wood into products that bear promise of
being valuable raw materials with many uses. One is methanol, or wood
alcohol. Four others had not been previously discovered. The proper-
ties of these new substances are such as to suggest their use as wood
preservatives, fungicides, insecticides, adhesives, solvents and plastic
materials. The codiscoverers, Dr. E. C. Sherrard and Dr. E. E. Harris,
describe the first new substance as paraprolycyclohexanol, valuable as
a solvent for organic gums and resins, and oils used in lacquers. It has
value as a preservative, and is about as repellant to insects as creos-
ote. The second and third substances, described as 4-propyl, 1, 2-di-
hydroxycyclohexane and 3-p-hydroxycyclohexylpropanol, are thick liquids
which become solid after standing a long while. Both may be made into
plastic materials. The fourth substance is crystalline and unnamed, as
the discoverers have not yet determined the positions of the carbon, hy-
drogen and oxygen atoms of which it is composed. As a byproduct of paper
and industrial cellulose mills, about 1,500,000 dry-weight-tons of lignin
are dumped into streams each year, making it a pollution and disposal
problem as well as one of waste. Roughly, lignin composes one-fourth
of the structure of all fibrous plants, including trees.

Motor Vehicle, The fact that farmers buy 5 billion gallons of motor
Fuel Survey fuel each year and other interesting data have been devel-
 oped through a recently completed cooperative survey con-
ducted by 40 farm publications. This survey shows that the farmer owns
an average of 2 1/2 motor vehicles; that the automobile is the most widely
owned vehicle, although the tractor uses twice as much fuel; that the
farmer uses more gasoline than any other fuel; and that 25 percent of the
tractors owned by farmers covered in the survey had high compression en-
gines. The survey was concentrated principally in the 18 leading tractor
states in which are located 83 percent of the more than 1 1/2 million
tractors, 69 percent of the 4,134,675 farm-owned automobiles and 68 per-
cent of the farm-owned trucks. (Implement & Tractor, April 1.)

Ohio Breeding "Organization in Medina County (Ohio) of the Coopera-
Association tive Bull Association marks the arrival in Ohio of artifi-
 cial breeding on a community basis and makes available to
every breeder in the county service to an outstanding bull at a reasonable
rate," says E. W. McMunn in Ohio Farmer (April 8). "...There are now
112 members in the Medina County Association and it is estimated that at
least 1,500 cows will be bred during the first year. Guernseys, Holsteins
and Jerseys are included in the present program. Membership in the asso-
ciation costs \$5, then a member pays a service fee of \$5 each time a cow
is impregnated. Return services are free if needed..."

New Apple American Fruit Grower (April) in an item on fruit
Varieties breeding says that at a recent conference horticulturists
 discussed new apple varieties. "Outstanding new apples
were the Kendall and Webster, introduced by the New York Experiment Sta-
tion. Webster is a very late-keeping apple of excellent size and medium
quality, but because of its late-keeping quality, it is worthy of extended
trial. It was introduced this past year. The Iowa Experiment Station's
showing of new apples included Secor, Edgewood, Sharon, Joan and Hawkeye
Greening. The quality of Secor was pronounced excellent by most of those
present. Edgewood also gave a good impression from the standpoint of
quality."

Mechanical Small electric refrigeration plants for cooling and
Milk Cooling holding milk are rapidly coming into use on farms, accord-
 ing to F.B. 1818, "Mechanical Milk Cooling on Farms," by
J. R. McCalmont of the Bureau of Agricultural Engineering. The recent
extension of rural electric lines is listed as one of the important reasons.
Among others are: improvement of the refrigeration machine, reduced cost
of electricity, saving in labor, regulations of health departments and
irregular deliveries of ice. It has detailed plans for a storage tank
and for small and large storage boxes, one of the walk-in type. The
author cautions that no amount of refrigeration can take the place of
care in cleaning the barn, milk room, and utensils. "Refrigeration keeps
the milk in the condition in which it reaches the plant but does not
eliminate bacteria." (Milk Plant Monthly, April.)

DAILY DIGEST

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Vol. LXVIII, No. 9

Section 1

April 13, 1939

PRESIDENT BACKS BARTER "Active negotiations by the United States Government looking to barter deals whereby the United States would trade some of its surplus farm commodities for 'strategic materials' to be stored against the possibility of a major war are expected to start in the next few days," reports Turner Catledge in the New York Times. "This was forecast after President Roosevelt had given a virtual go-ahead signal on the project during a conference yesterday with Secretary Wallace. The negotiations will be carried on through diplomatic channels by the State Department...Mr. Wallace volunteered the information that the Administration saw definite possibilities in the proposal (by Senator Byrnes of South Carolina). He estimated that surplus cotton to the extent of a million or more bales a year and large quantities of carry-over wheat might be moved, chiefly in exchange for rubber and tin. These are the two materials most needed as 'strategic' stores for this country... A basic part of the plan is that the goods should be stored by the recipients on both sides...Senator Byrnes suggested that the governments of England, Holland and Belgium would first be approached on deals for exchange..."

MERIT SYSTEM BILL APPROVED Approval by the House Civil Service Committee of a bill for blanketing some 200,000 federal employees into the classified civil service after noncompetitive examinations was indicated last night following termination of three weeks of hearings, says a report in the Washington Post. Chairman Ramspeck of Georgia said he would offer only one substantial amendment to the bill--stipulating that employees who fail to pass the noncompetitive tests be separated from the service after a six-month period. The measure would give the President permissive authority to cover into the classified service the bulk of federal personnel now remaining outside the merit system. The President has indicated he is ready to do this once legal barriers are removed by this bill.

CONSERVATION OF BIRDS Growing recognition of the value of birds, not only as embellishments of the world but as aids to man, has brought about greater support for efforts to preserve species which have been diminishing in numbers, Dr. Harry C. Oberholser, Department of Agriculture biologist, said night before last to the Columbia Historical Society. Dr. Oberholser, one of the nation's outstanding champions of birds, pointed out that protective measures have succeeded in saving the beautifully marked wood duck from extinction and are increasing trumpeter swans. The bald eagle has been endangered by payment of bounties in Alaska, he said. (Washington Star.)

Vegetable Lela V. Barton, in Contributions from Boyce Thompson
Seed Storage Institute (January-March) reports studies on the storage
 of vegetable seeds. A summary says: "The life span of
lettuce, onion and cauliflower seeds stored at room temperature could be
prolonged markedly by adjustment of moisture contents to approximately
6 to 8 percent. Reduction in moisture content also proved beneficial for
seeds of tomato and carrot if sealed containers were used at room tempera-
ture but these seeds also remained viable in open containers. Seeds of
eggplant indicated a response similar to those of tomato and carrot, al-
though the former, air dry, remained viable much longer in sealed storage.
Although reduction in moisture content delayed deterioration of pepper
seeds at room temperature, results indicated that low temperature was
necessary for successful storage for periods longer than four years. Ger-
mination tests of old and fresh seeds stored for short periods at various
humidities and temperatures indicated that with relative humidities of
50 percent or lower, the temperature may be as high as 35 degrees C. for
seeds with high germination power and the storage period as long as three
months without serious impairment of germination. At relative humidities
above 50 percent, however, safe storage temperatures were 20 degrees C.
or lower. Pre-treatment of lettuce seeds on a moist medium at 25 degrees
C. or below permits germination at high temperatures which are ordinarily
prohibitive. Pre-treated seeds may be dried at room temperature for at
least three days after which a germination of 50 percent can still be ob-
tained at 30 degrees C. and 25 percent at a temperature of 35 degrees C."

Senate, Passed H.J.Res. 246, making an additional appropria-
Apr. 11 tion of \$100,000,000 for relief.

Mr. Thomas of Oklahoma submitted amendments which he
intends to propose to H.R. 5269, agricultural appropriation bill for 1940,
as follows: providing \$30,000 for purchase of materials to be used in
conjunction with WPA labor in improving roads in Wichita Mountains Wild-
life Refuge; increasing maintenance of mammal and bird reservations from
\$600,000 to \$680,000.

House, Debated H.R. 5324, to amend the National Housing Act.
Apr. 11 House conferees were appointed on the War Department
 appropriation bill, H.R. 4630.

(Prepared by Office of Budget and Finance.)

Farm Products Receipts from farm marketing in February were \$430,-
Receipts 000,000, a reduction of 6 percent from February 1938, the
 Bureau of Agricultural Economics reports. Receipts from
the sale of principal farm products in February were 9 percent higher in
the Western States, 7 percent higher in the West North Central States and
1 percent higher in the North Atlantic States than in February 1938. De-
creases reported for the other three regions were 30 percent in the South
Central States, 22 percent in the South Atlantic States and 3 percent in
the East North Central States. (Press.)

Crop Report April reports on crops show a marked improvement as of April 1 since last fall in prospects for winter wheat particularly in the southern part of the Great Plains area, generally favorable prospects for fruits and somewhat better than average prospects for rye, pastures and early potatoes. Winter grains have come through so far with moderate winter losses and although a part of the acreage of wheat seeded last fall on some farms will be plowed up or pastured to comply with AAA allotments, the total abandonment of winter wheat from all causes is expected to be about 16 percent, or 3 points above average. Good rains in the Southwest have greatly improved wheat prospects in that area and the United States winter wheat crop to be harvested in 1939 is now estimated at 549,219,000 bushels. This is 64,000,000 bushels above prospects last fall and indicates about an average yield per acre sown and nearly average production. The winter rye is also reported in better than average condition with a rather large acreage still in prospect. An ample supply of fruit now seems likely for 1939 although production may not be quite as heavy as during the last two years.

Gas Fruit Storage F. W. Allen, pomologist at the University of California, in experiments using dry ice and mixtures of carbon dioxide gas and air for cold storage of deciduous fruits, has been holding apples with about 10 percent of carbon dioxide in the air of the storage chamber. It was noted that Newtown Pippins held at 40 to 45 degrees temperature came out of storage in as good condition as if they had been held at 32 degrees without the gas. No browning was noted. With so much browning in the case of Newtown Pippins, this was an important observation because the practice has been to hold Pippins at around 38 degrees to avoid browning. (Better Fruit, April.)

Wheelbarrow Sprayer What looks to be an item of real interest for the nurseryman, berry grower, or fruit grower with a small planting, is the new wheelbarrow sprayer. This compact outfit has a porcelain-lined pump that delivers 225 pounds pressure. The one-half horsepower, 4-cycle engine is air-cooled and has a hand lever starter. An electric motor can be substituted for the engine if the sprayer is to be used where current is available. The unit is balanced on an all-steel, arc-welded frame which, along with the rubber-tired wheel, makes for easy operation. Agitation of the spray material in the tank is accomplished by movement of the suction pipe and strainer. (American Fruit Grower, April.)

Bell Ringing Radio Device "A new bell-ringing device which permits emergency radio calls to be put through as easily as telephone calls has been developed in the Forest Service Laboratory at Portland, Oregon," says American Wildlife (March-April). "This standby unit has been developed for the new Type T ultra-high frequency radio set, which is a semi-portable outfit operating on 30,000 to 40,000 kilocycles. Any Forest Service ultra-high frequency radio set, however, even the

lightest 8-pound portable, can call a lookout or other station equipped with this bell-ringing device. Extensive field tests over a period of 6 months indicate that it is exceedingly simple and foolproof. Lookouts and other forest officers will no longer need to stay close to their radio sets waiting for calls, as the device may be adjusted to carry signals to men working outside their stations. Lookout men can be aroused from sleep by the ringing bell. Code rings are possible when several stations are included in any one Forest Service network...It is believed that this is the first time that bell ringing has been incorporated in truly portable, dry-battery-operated radio equipment."

Citrus Pulp for Feed A waste product that is being used to aid in reducing the cost of stock feed and possibly in raising the value of other feeds is dried citrus pulp, according to G. S. Fraps, chief of the chemistry division, Texas A. and M. College Experiment Station. The peel, rag and seeds of grapefruit are collected from canners in the Rio Grande Valley area and processed by addition of lime to facilitate drying. The dried product contains about 6 percent protein, 2.5 percent fat, 62 percent nitrogen-free extract and fiber. Feeding tests have indicated good productive energy value although low in protein. The productive energy appears to be about 10 percent less than corn and it is suitable feed for cows, beef cattle or sheep. Tests indicate that the citrus pulp is not suitable to form the entire concentrate portion of the cattle ration. With fed in equal amounts with corn, the results compare favorably and are about the same as when corn alone is used. When citrus pulp forms 25 percent and corn 75 percent of the concentrate the results are slightly better than when all corn is fed. This indicates a possible value as an appetizer or amendment to the ration. The experiments with citrus pulp are to be continued at the Texas station. (Coastal Cattleman, April.)

Indiana Egg Law Hoosier Farmer (April) reports that "an egg control measure was passed by the (Indiana) legislature of 1939. The bill provides that dealers cannot advertise 'fresh eggs' unless they have a license to do so...No dealer is compelled to take out a license to sell eggs. However, if he advertises or displays eggs listed as 'fresh eggs,' then he must have a license. Last summer a representative of Purdue University repeatedly purchased eggs in Indianapolis from dozens of stores, large and small, paid prices on the same day ranging as much as fifteen cents a dozen difference, and little difference in quality was found. In some instances more than 75 percent of the eggs (sold as strictly 'fresh' eggs) were wholly unfit for human consumption. Price proved no guarantee or guide to quality...Other states have laws similar to the one passed in Indiana..."

Frozen Vegetables The February movement of frozen vegetables out of storage was the heaviest on record, totaling 6.3 million pounds as compared with 3.7 million pounds in January. (The Canner, April 8.)

DAILY DIGEST

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Vol. LXXIII, No. 10

Section 1

April 14, 1939

WHEAT EXPORT GOAL REACHED The Department of Agriculture reported yesterday that export sales of wheat and flour since last July totaled 101,300,000 bushels. That was the goal established under the government's export subsidy program. The Department said 79,000,000 bushels had actually been exported. The government paid, the Department said, an export bounty averaging between 25 and 30 cents a bushel on 77,000,000 bushels. Sales of wheat represented 82 percent and flour 18 percent of the total sales. When the export subsidy program was inaugurated, Secretary Wallace said it was designed to help the United States place its "fair share" of wheat in the world markets during the marketing year ending next July 1. He estimated that share at "around 100,000,000 bushels." (.A.P.)

CROP DAMAGE FROM COLD An Associated Press report from Chicago says the U.S. Weather Bureau stated the worst of the cold snap was over but that no real balmy weather was in sight. Extensive damage to budding fruit and some grain crops was reported in agricultural areas. Smudge fires burned through the night in the Vincennes, Ind., fruit belt. Orchardists said the apricot, plum and pear crops in Pike County were almost a total loss. Northwest Arkansas fruit growers feared apples, grapes and berries already in bloom had been injured by the unseasonably low temperatures. Big lettuce and onion crops on Long Island, New York, were similarly threatened.

CIVIL SERVICE RULING The President, by an Executive order issued recently, has enabled persons who come to exempted jobs from civil service registers to have full civil service retirement, promotion and reinstatement benefits, says a report in the Washington Post. This means that employing officers, if they choose, can hire civil service people into positions that are exempted from civil service by statute or Executive order and guarantee them civil service benefits, the same they would enjoy if employed in positions that carried regular civil service status.

STATE TRADE BARS ASSAILED A growing tendency by states to erect trade barriers is assailed as a menace to the country's economic welfare in a report adopted yesterday by the Merchants Association of New York. The report called on Governor Lehman and the Legislature to join in the movement to maintain "as complete freedom of trade between the states as is consistent with...laws intended primarily to raise revenue." (New York Times.)

House, Passed H.R. 5324, to amend the National Housing Act.
Apr. 12 An Associated Press report says the amendment would extend for two years the powers of the Federal Housing Administration and raise from \$3,000,000,000 to \$4,000,000,000 the amount of mortgages it may insure. Unless Congress continues its powers, they expire June 30.

Native Rural Handicrafts An increased demand for native rural handicraft articles on the part of accessory importers, as a result of the cessation of imports from the former Czechoslovakia, was foreseen in a report made recently by Dr. Edith Allen of the Department of Agriculture to the Capital Division of the Woman's National Farm and Garden Association. Dr. Allen stated there remains at present sufficient import stock on hand to last about a year, which should provide enough time for rural handicraft workers to build up a profitable industry. Such articles as buttons, dress findings, feather novelties and small leather articles will be in demand, she predicted, when the Czechoslovakia supply is exhausted. The Farm and Garden Association encourages the development of American rural handicraft. (Washington Post.)

Custom Terracing The Missouri Extension Service is credited by a Missouri trade magazine with having organized America's first association of custom terrace builders. This organization, known as the Missouri Terracing and Conservation Contractors Association, is made of individuals and companies that do custom terracing for Missouri farmers. This new industry has grown up within the last 2 or 3 years as a result of the widespread acceptance of scientific methods of erosion control. The services rendered to farmers by these contractors include laying out the terrace lines in accordance with correct engineering practice, actual construction of the terrace ridge on the lines surveyed, the construction of waterways, and all types of scraper and fill work required in building terraces and outlet systems. Custom terracing, with the contractor furnishing the power and machinery needed, was done in 1938 in at least 29 Missouri counties. Rates charged have varied somewhat, according to county agent reports, ranging from \$45 to \$52 a mile for completed, standard, broad-base terraces, with a charge of \$4 to \$5 a mile for laying out the terrace lines. (Extension Service Review, April.)

Irrigation Aids Trade Manufacturers of the East, Midwest and South receive \$200,000,000 of business a year from federally developed irrigation areas, according to an estimate of Commissioner John C. Page of the Bureau of Reclamation. The estimate was based on full carload lots of goods shipped by rail into one of the bureau's fifty irrigation developments, the Boise area in Idaho, which showed merchandise rolling into the region from 30 different non-western states. (Press.)

Turkey
Survey

B. H. Bennett, Bureau of Agricultural Economics, in an article in Turkey World (April) interprets the second "Intentions to Start Poults Report," saying in part: "A survey of several thousand growers, recently made by the Bureau of Agricultural Economics, indicates that producers intend to raise 27 percent more turkeys this year than last. This is their response to last year's favorable returns and to the liberal feed supplies available at low prices for raising this year's crop. Producers' plans call for 22 percent more poults to be hatched at home this year. They further intend to increase last year's purchases from commercial hatcheries by 34 percent. The latter intention is supported by the bureau's hatchery report which shows a doubling in the advance orders listed on the books of hatcheries March 1, compared with a year earlier...It is, of course, very improbable that the full increase indicated by the survey will be realized..."

Berry Air
Conditioning

In American Fruit Grower (April) the secretary of the Minnesota Horticultural Society reports: "Several of the new conditioning rooms for berries are being constructed this spring by growers. A room of this type provides for controlled ice refrigeration, circulation of air by an electric fan and provision to greatly increase the natural carbon dioxide content of the air in the room. Refrigeration is controlled by a special damper so that the berries are not cooled below 58 to 60 degrees F. This provides an ideal temperature and humidity for the temporary storage of berries. The added carbon dioxide replaces much of the oxygen in the room and thus slows down the respiration of the fruit. The result is that the berries retain their freshness and bright appearance for many hours longer than usual, and they do not deteriorate as quickly when removed from the room as do berries removed from ordinary low temperature refrigeration. The use of this type of room has been developed as a result of experimental work started in 1936 at the University of Minnesota. The process was used commercially to a small extent in 1937 and to a much larger extent in 1938."

Cotton Grade
and Staple

The Bureau of Agricultural Economics reports that cotton ginned from the 1938 crop was longer in staple and higher in grade than that ginned from the crop of 1937. The BAE said that of the 11,620,601 bales ginned from the 1938 crop all was reported as American upland with the exception of 20,501 bales of American Egyptian and 4,273 bales of Sea Island. Of the American upland cotton, 21 percent was white in color and strict middling and better in grade, and 32 percent was white in color and of middling grade. Cotton of the spotted grades constituted 21 percent of the upland crop and a little more than one-half of the spotted cotton was strict middling and better in grade. This year there was an appreciable decrease in the proportion of cotton shorter than one inch in staple, the BAE said. The proportion of untenderable cotton decreased from 18 percent last year to 6 percent this year. (Wall Street Journal.)

Forest Fire Talking Film Expert technicians and a director from Washington have invaded the piney woods of the South to help fight the scourge of the timberlands--forest fires--with a movie camera, says a report in the Atlanta Constitution (April 3). W. Allen Luey, motion picture director of the U.S. Forest Service, said it was the first time the Forest Service has made a film dealing strictly with fire protection on southern private forest lands. Eleven southern states are cooperating. "We plan to show the damage and losses caused by the indiscriminate use of fire," Luey said, "as contrasted to the assets to be gained through proper methods of fire control and prevention." In the Southern States privately owned forests cover an area equalling the combined size of England, France and Denmark. Only 41 percent of this huge privately owned forest empire is now under some form of organized fire protection. Because of this lack, the South is listed by Forest Service officials as the nation's No. 1 fire problem. It is for educational purposes that the film is being made, to educate the public to the need and importance of being careful with fire in the woods.

County and Home Agents "That the program of the home demonstration and county agents should be greatly expanded in Florida becomes immediately obvious to everyone who takes time to study the achievements of these highly essential agencies," says an editorial in the Florida Times Union (April 9). "Both departments are engaged in work that is designed to strengthen the very fundamentals of economics and citizenship...A summary of the accomplishments under the home demonstration program represents one of the brighter phases of life in Florida. Home demonstration agents are not on duty in each of the 67 counties, some of the county authorities not yet realizing how important their work is to the welfare and progress of the farmers and their families..."

Georgia Cotton Freight Rates A revision of freight rates for hauling cotton has been ordered by the Georgia Public Service Commission. The revision was requested by the railroads in efforts to regain tonnage lost to other forms of carriers. The order permits the railroad companies to revise their "any quantity" cotton rates within the state and to establish for a trial period rates on cotton when in carload. Previously, all rates on cotton have been applied regardless of weight. The new carload rates are an innovation requested by the rail carriers and rates per 100 pounds will be materially below those which were made effective in 1882. The reductions in the 1939 rates, compared with the 1882 rates, are: 5 cents saving for 25 miles; 7 cents saving for 50 miles; 5 cents saving for 100 miles and 200 miles. (Atlanta Constitution, Apr. 9.)

Herbarium Nearly 5,000 mounted specimens, representing more than 1,400 species of higher plants, comprise the nucleus of the herbarium of the Great Smoky Mountains National Park in Tennessee and North Carolina, says the Interior Department. (Press.)

DAILY DIGEST

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Vol. LXXIII, No. 11

Section 1

April 17, 1939

TRADE PACT ANALYSIS

The economic, fiscal (and by inference political) advantages of the American method of trade agreements, as opposed to the barter system built up by the totalitarian governments, is emphasized by the Department of Commerce in an analysis of American exports in contrast with German. "During the three years 1936, 1937 and 1938," the statement says, "imports into sixteen countries with which trade agreements have been concluded showed a much larger average rate of increase from the United States over the two pre-agreement years 1934-35 than imports from Germany, the chief exponent of barter, clearing, compensation or similar trade programs." As an argument in support of President Roosevelt's proposal of an economic conference as a contributing factor to world peace, the department's analysis of the effect of barter agreements upon the world economy carries great significance. (New York Times.)

COTTON EXPORT, BARTER PLANS

Agricultural administration lawyers were reported to have ruled that a change in the 1938 farm law as well as a Congressional appropriation would be necessary before the administration could carry out its proposal to subsidize exports of cotton from its loan stocks. Legal advisers are said to have informed the Secretary of Agriculture they believed the 1938 law barred release of government loan stocks before August 1.

Meanwhile, the State Department advised farmers that the administration-backed scheme to barter surplus American cotton and wheat to the European democracies for such strategic war materials as rubber and tin would not be allowed to depress prices of farm products in this country. In a statement, the department said the administration "was not seeking to press American supplies into world markets." (A.P.).

DEMAND, PRICE SITUATION

Fears of a general European war are beclouding the prospects of a moderate spring and summer upturn in the business activity in this country, the Bureau of Agricultural Economics says. In its monthly report on economic conditions, the bureau said the past month had been marked by three developments: A further tenseness in the political situation in Europe, a sharp decline in stock market values and failure of the automobile and steel industries to expand as had been expected. "These developments and uncertainties tend to reduce, but do not eliminate, the possibility of some improvements in business by summer," the bureau said. (A.P.).

April 17, 1939

Senate, Considering bills on the calendar, the Senate passed
Apr. 13 the following: S. 1096, to amend the marketing agreement act
 of 1937 to make its provisions applicable to Pacific North-
west boxed apples; S. 1871, to prevent pernicious political activities;
S. 1569, to amend the agricultural adjustment act of 1938 by continuing
for 2 years the cotton acreage allotment to counties provision; S. 1109,
to amend the act for toll bridge elimination by providing that such funds
may be used to match unobligated regular and secondary federal-aid road
funds; S. 1985, to amend the act for toll bridge elimination by extending
from July 1, 1939, to July 1, 1941, the time within which states may take
advantage of the act; S. 1416, to make the provisions of the employees
compensation act applicable to all civil officers of the U.S.; S. 1796,
to amend the Tennessee Valley Authority Act with respect to issuance of
bonds, etc.

Mr. Clark of Idaho submitted amendments which he intends to propose
to the bill, H.R. 5269, agricultural appropriation, as follows:
increasing National Forest protection and management from \$11,819,754
\$12,069,754; increasing range investigations from \$225,935 to \$250,935;
increasing forest influences from \$139,152 to \$199,152; increasing con-
trol of predatory animals and injurious rodents from \$650,000 to \$1,000,-
000. Mr. Barbour submitted amendments to the same bill, as follows; pro-
viding that no state's extension work funds shall be reduced during 1940;
increasing airways weather service and research from \$3,334,000,095 to
\$4,105,030; providing \$375,000 for gypsy and browntail moth control; pro-
viding \$678,489 for Dutch elm disease eradication; increasing crop and
livestock estimates from \$642,799 to \$892,570.

Received from the Secretary of Agriculture a report on influences
keeping flaxseed prices below parity, pursuant to S.Res. 167, 75th (S.Doc.
62).

Both Houses received from the President a draft of proposed legisla-
tion to authorize cooperation with American republics in accordance with
treaties, etc. (H.Doc. 251).

House, Passed S.J.Res. 90, providing additional funds for
Apr. 13 the Temporary National Economic Committee.

The Committee on Coinage, Weights and Measures re-
ported with amendment H.R. 3325, to extend powers relating to stabiliza-
tion fund and dollar devaluation (H.Rept. 406).

Both House and Senate adjourned until April 17.

(Prepared by Office of Budget and Finance.)

Iodine Announcement was made recently by the Wisconsin
Research Alumni Research Foundation that a patent relating to the
 use of reducing agents capable of preventing the oxida-
tion of iodides in salt and various mineral mixtures has been issued to
the Foundation. This patent is based upon extensive study by Drs. Hart,
Grien and Clifton of the University of Wisconsin, on processes designed
to stabilize the iodine content of salt, limestone and mineral and dry
feed mixtures. The method is simple, economical and permanently stabilizes.
(Grain & Feed Review, April.)

Plant Disease Neil E. Stevens, University of Illinois, writes to
Estimates Science (April 14) on disease, damage and pollination types
 in "grains." He says in part: "In an attempt to evalu-
ate disease losses in the United States, one naturally turns first to the
estimates of disease losses compiled by the Plant Disease Survey. These
have, however, been systematically collected for only 20 years and suffer,
to some extent, from the lack of regular reports from many states...Eco-
nomic importance, while difficult to measure, must be in some way a func-
tion of the value of the crop concerned, the loss caused by the disease
and the fluctuations in loss. Other things being equal, even the average
losses over a period of years, that disease is the most important which
fluctuates most...I have tabulated the total pages regarding the diseases
of various important crops in the publications of the U.S. Department of
Agriculture up to January 1925, of the Experiment Stations up to December
1, 1927, and in Phytopathology up to January 1927. This covers, for the
experiment stations, a period of 40 years, and, in the case of the Federal
Government, goes back even before the Department of Agriculture was or-
ganized and includes some publications of the Commissioner of Patents.
My reason for stopping at a point over a decade ago is that these are the
dates of the excellent bibliographies compiled by Miss Jessie Allen, li-
brarian of the Bureau of Plant Industry...It may be possible to obtain a
measure of the apparent relative economic importance of diseases in the
culture of crops which have a not too widely different value per acre,
are marketed in somewhat the same way, and produced by more or less com-
parable groups. Such a unit is apparently found in the crops classed to-
gether as 'grain crops' for statistical purposes in the publications of
the U.S. Department of Agriculture..."

State Trade F. Eugene Medler, Department of Economics, Clark Uni-
Barriers versity, writing in State Government (April) on "The World
 Trade Situation and State Trade Barriers," says in part:
"Research reveals that discrimination (by trade barrier legislation)
breeds retaliation and reprisal within the limits permitted by the courts
interpreting the Constitution. The result is that the gains made by
local producers in the short run are made at the expense of other eco-
nomic groups or the community at large, in the long run. Again, the
short run benefits to local groups are apt to be self-defeating by in-
spiring the state governments and producers in excluded areas to take
steps to change their product or form of business organization to comply
with the requirement of the discriminatory law so as to wholly avoid the
discriminatory features. We may illustrate this point by the case of the
Bang's disease quarantine enacted by New York some years ago. The State
of Wisconsin, where the cattle producers ^{were} most affected by the New York
Bang's disease quarantine, took steps with federal assistance to eradi-
cate Bang's disease from Wisconsin herds, in accordance with New York re-
quirements. At the end of 1938, 23,971 Wisconsin herds had been certi-
fied to be free of Bang's disease. Having passed three consecutive tests
for the disease, cattle from these herds can be sold in the New York
market."

Waxing
of Fruit

"...Citrus fruits in California, Florida and Texas are now being successfully waxed on a large scale," says L. L. Claypool, California College of Agriculture, in the Blue Anchor (April). "Paraffin is the principal material used, although in some cases carnauba wax is mixed with it in order to improve the luster qualities. These waxes are either applied as a hot fog or through contact by brushes. In another recent development wax is dissolved in a solvent that is also atomized to a fine mist and sprayed onto the fruit. The use of water emulsions of waxes on California citrus has proved unsatisfactory because of off flavors developing after the treatment. The same types of waxes applied by other methods seem, however, to have no deleterious effect on flavor. Since water loss is much reduced, the appearance of the waxed fruit remains better than that of untreated fruits... Though deciduous fruits have not been waxed commercially as yet, commercial tests will probably be made in the 1939 season." Reporting studies at the California station on waxing deciduous fruits, he discusses water loss, keeping and dessert quality, and decay, and says that "within the next few years enough commercial tests on a small scale will probably be made to establish the future possibilities of shipping wax-coated fruits."

Poultry
Mortality

The National Poultry Digest (April) contains a condensation of a talk, "Meeting the Poultry Mortality Problem," by J. Holmes^{Martin} of the Department, who is in charge of a poultry research laboratory at East Lansing, Michigan. He believes that too much attention has been focused on the individual record (the 300-egg hen). "In many cases the son of a 300-egg hen has become the sire of hundreds of chicks before it was learned that his sisters showed excessive mortality in the laying house. In many cases it is too late to correct this situation and he becomes a grandsire of hundreds of low-viability pullets. In addition to breeding from mature stock, a conscious selection for large families and longevity should be practiced. There is little doubt but what long life is inherited in poultry as well as in humans... We must think in terms of flock averages and of total egg production from a laying house that has been filled with pullets and place less emphasis on 300-egg records. Many will say that breeding for resistance to disease, longevity and large family size presents a long-time seemingly impractical program. However, where no other means for the control of a specific disease exists, genetic selection is advisable even though improvement of the stock comes slowly... The wise poultryman... will plan to include conscious selection for longevity and viability as measured through large families."

Reorganization

President Roosevelt has called on federal department heads to submit by April 25 plans for reorganization of government bureaus. The law requires that all executive reorganization orders be subjected to congressional consideration for 60 days before they become effective. Disapproval of both branches is required to invalidate an order. (A.T.)

DAILY DIGEST

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Section 1

April 18, 1939

SUPREME COURT AAA RULING

"The new Agricultural Adjustment Act, and with it the Administration's theory of planned agriculture, won a sweeping victory in the Supreme Court yesterday when that tribunal covered within the protection of the Constitution the marketing quotas applied to the tobacco crop of 1938," says Turner Catledge in the New York Times. "The decision was by a six-to-two decision, affirming a decree of a lower court in Georgia, with Justices Butler and McReynolds dissenting. By it the largely revised Supreme Court nullified the practical effects of the six-to-three decision in the Hoosac Mills case of January 1936, by which it struck down the original Agricultural Adjustment Act on the ground that it aimed, through the employment of processing taxes, at control of production. Production, the court held then, was a local matter and not within the province of the Federal Government to regulate. The ground upon which the practical reversal was made yesterday was a distinction drawn by the court's new majority between 'production' and 'marketing'...The majority opinion was written by Justice Roberts, who was the author of the decision that undid the original AAA in 1936. Yesterday he upheld the government on all grounds raised by the attackers of the tobacco quota sections, in a case known as Mulford vs. Smith, in which the Administration had intervened..."

RFC LOWERS INTEREST RATE

The Reconstruction Finance Corporation cut its interest rate on loans to business from five to four percent yesterday. The step was believed to be a part of the government's business recovery program. The interest cut was effective April 1, 1939, an announcement by Jesse Jones, RFC chairman, said. It will continue in effect for three years. It was also announced that interest on another type of loan, called "self-liquidating," and including loans on such projects as toll bridges, would remain at four percent for the next three years. (A.P.).

FARM BENEFIT PAYMENTS

The House passed and sent to the Senate yesterday legislation reducing from \$10,000 to \$5,000 the maximum amount of farm benefit payments one person can receive under the farm act. The legislation also would cut by 25 percent payments in excess of \$1,000. The House also passed a bill raising from 100 to 200 bushels the amount of wheat grown on a single farm which is exempt from wheat marketing quota provisions. (A.P.)

Nature Aids "A demonstration of the power of nature to 'come back'
Conservation when simple conservation methods are employed was told by
 F. T. Trenk, Wisconsin extension forester--the story of how
just fencing a woodlot brought an extinct spring to life," says an editorial in *Fur-Fish-Game* (May). "The woodlot is on the farm of George Stivarius in Grant County. Stivarius purchased the farm over 30 years ago. At that time the woodlot had been heavily pastured and it was hardly more than an open grove of trees. When Stivarius learned from neighbors that there was once a flowing spring on the woodlot, he decided to put to a test what conservationists call 'the theory of wood influence.' He fenced off the woodlot--nothing more. In less than five years water began seeping from the old spring. As leaf litter accumulated, the flow increased. Today, reports Forester Trenk, a strong stream from the spring fills a 2-inch pipe that carries the water to a tank in the adjoining pastures. 'The transformation that has occurred in the woods during that time,' said Trenk, 'is almost as spectacular as the revival of the spring. Every trace of sod and grass has disappeared, replaced by a thick layer of decaying forest litter. The deep shade has caused the disappearance of the sun-loving plants and has replaced them with plants of the heavy forest of the north. The owner has his spring and an unusually good farm woods.'"

Kansas Wheat John H. Parker, Director, Kansas Wheat Improvement
Improvement Association, in the *Northwestern Miller* (April 12) in an
 article on wheat improvement, describes the association's work
in Kansas, saying in part: "One hundred samples of wheat were collected from 100 farmers in each of 31 counties. These samples were planted in wheat crop testing plan plots, 100 samples in each county. Certified seed of standard varieties, such as Turkey and Tenmarq, was planted in each plot for comparison with farm samples. A wheat field day will be held at each plot in June. Wheat variety experts will class each farmer's wheat as A, B, or C. A indicates a pure sample; B, slightly mixed, C, badly mixed, unfit for planting. There are 40 named, distinct varieties of winter wheat now grown on Kansas farms. The Kansas Wheat Improvement Association, the Kansas Crop Improvement Association, Kansas State College and the U.S. Department of Agriculture are agreed that six varieties, four of hard red winter and two of soft red winter, would fill the bill... We should all work together to reduce the number of varieties grown in Kansas to a few standard sorts that yield well and have other characteristics demanded by farmers and that at the same time satisfy the more and more exacting requirements of the grain trade, the miller, the baker and the ultimate consumers."

Lamb Crop The Department of Agriculture said recently that
 developments of the early lamb crop during March was below average for the country as a whole and much below the exceptionally favorable development in March of last year. It attributed this condition to a shortage of grain feed in California and Texas. (A.P.).

Patent
Book

Waldemar Kaempffert, in the Science News column in the Sunday New York Times, reports: "Dr. Merle Randall, professor of chemistry, and Evelyn B. Watson, research librarian, University of California, have prepared a booklet which does for the patent information seeker what a telephone book does for an address seeker if all numbers were arranged in their numerical order and he knows only the number of a telephone subscriber. Thus if the inventor knows only the patent number (the usual case) the booklet refers him to the Official Gazette of the U.S. Patent Office or some Congressional document."

Farm Wages
Advance

The general level of farm wage rates increased about the usual seasonal amount from January 1 to April 1, reports the Bureau of Agricultural Economics. At 121 percent of the prewar level, wage rates averaged 4 points higher than at the beginning of 1939 and the same as on April 1 last year. The increase in wage rates since the first of the year is attributed largely to a slight decline in the supply of workers available for hire in rural areas and to a seasonal upturn in the demand for their services. Monthly rates rose seasonally in all areas except in the South Atlantic States and on the Pacific Coast. Average day rates, without board, showed no change the past quarter and ranged from 80 cents in South Carolina to \$3 a day in New Hampshire. The number of people, paid and unpaid, working on farms April 1, was estimated by the bureau at 9,960,000. This number represents a seasonal increase during the quarter of more than 500,000 hired hands and approximately 635,000 family workers. The April 1 total, however, was about 2 percent less than a year earlier.

Citrus Juice
Bread

The Florida Times Union (April 10) in an editorial on citrus juice bread, says in part: "Miss Isabelle Thursby, food specialist of the Extension Service, says that citrus juice has been utilized in Florida for years in bread. Rural women who have lived in citrus groves for years and city women as well, she points out, 'have known for a long time that the juices of lemons, sour or wild oranges, grapefruit, or sweet oranges, used for all or part of the liquid in baking, will make light, tender and palatable doughs and batters.' 'For cakes and quick breads, particularly,' Miss Thursby says, 'citrus juices may be used just as sour milk or buttermilk is used for all or part of the liquid in the recipes...'"

Pure Food
for Dogs

"The American Animal Hospital Association is doing what it can to tell the nation's veterinarians which prepared dog foods are good and which are not," says an item in the New York Times. "Its experts buy dog foods in the market, remove the labels, give them non-committal numbers and put them through chemical, biological and feeding tests. Rats are the test animals. Their growth is measured, their blood and bones examined. Such matters as protein quality, mineral assimilability and vitamin content are determined."

F. C. Meier

The leading article in Phytopathology (April) is a 6-page appreciation, with photographs, of the late Fred Campbell Meier (Extension Service) by Royal J. Haskell, Extension Service, and Howard P. Barss, Office of Experiment Stations. The last paragraph says: "Meier's all-absorbing interest in science was in its relation to human welfare. The loss to the world of such a martyr is immeasurable. At the age of forty-five, after ten years of preliminary air scouting to which, as an avocation, he had given without stint his vacations and out-of-office hours, Meier was hopefully starting a major organized exploration to extend scientific knowledge along new and important frontiers. To this field of aerobiological research, with the aid of others whom he had inspired, he might well have devoted the remainder of a long and active life. It will be impossible to replace a man who combined such courage, keenness of mind, breadth of outlook, and organizing ability with such an unfailing spirit of consideration and friendliness."

Prevent Fires

The April issue of American Forests is devoted to forest fire prevention. Among the articles are: Fire, Flood and Erosion, by H. H. Bennett, Chief, Soil Conservation Service; Burning Wildlife, by Ira N. Gabrielson, Chief, Biological Survey; Men Against the Flames, by F. A. Silcox, Chief, Forest Service; Who Starts These Fires? by Roy Headley, chief, division of fire control, Forest Service; The Evolution of Fire-Fighting Equipment, by David P. Godwin, assistant chief, division of fire control, Forest Service; The CCC as a Fire Fighting Unit, by John D. Guthrie, general inspector, CCC, Department of Agriculture. Six rules for preventing fire in the forests are: Matches--be sure your match is out; Tobacco--be sure that pipe ashes and cigar or cigarette stubs are dead before throwing them away, never throw them into brush, leaves or needles; Making Camp--before building a fire scrape away all inflammable material from a spot five feet in diameter, dig a hole in the center and in it build your camp fire, keep your fire small, never build it against trees or logs or near brush; Breaking Camp--never break camp until your fire is out, dead out; Brush Burning--never burn slash or brush in windy weather or while there is the slightest danger that the fire will get away; How to Put Out a Camp Fire--stir the coals while soaking them with water, turn small sticks and drench both sides, wet the ground around the fire, if you can't get water stir in dirt and tread it down until packed tight over and around the fire, be sure the last spark is dead.

Poultry
and Eggs

Marked changes have been made in the poultry and egg industry in recent years. Twenty years ago the production of chickens and eggs was commonly regarded as a "pin money" enterprise for the farmer's wife; today it is a commercialized--in many ways, a mechanized--industry that adds more than a billion dollars annually to the farm income. Nearly 6,000,000 farms in the United States have poultry flocks. (Agricultural Situation, April.)

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Vol. LXXIII, No. 13

Section 1

April 19, 1939

SURPLUS FOOD STAMP PLAN

Rochester has been selected as the first of half a dozen cities in which the new food stamp plan of the Department of Agriculture for the distribution of farm surpluses through the normal channels of trade will be tried, says a report in the New York Times. Two variations of the plan will be tested. Under one, WPA workers may request that an amount equal to at least \$1 and not more than \$1.50 a week for each member of the family be deducted from their wages, and they will receive orange stamps of a corresponding amount which will be good for the purchase of any food. Blue stamps, representing 50 percent of the value of the orange stamps, will be given free, but they will be accepted in exchange only for foods designated as surplus. The stamps will be redeemed by the government. Under the other plan, from \$1 to \$1.50 in orange stamps could be bought by any person receiving general relief, old-age assistance, aid to dependent children and aid to the blind. For every dollar paid for orange stamps by those who are eligible, 50 cents worth of blue stamps would be given free.

REVIVAL OF PROCESS TAX

Revival of processing taxes as a means of financing an expanded farm program was discussed at the Capitol and the Agriculture Department yesterday as the first direct result of the Supreme Court's validation of the AAA marketing controls. Senator Lucas of Illinois, leader of a midwest farm bloc seeking \$400,000,000 additional for farm surplus subsidies and parity price payments, said he believed the decision "left the way clear" for imposition of the taxes. AAA spokesmen pointed out that Secretary of Agriculture Wallace recently renewed recommendations for processing taxes, and declared Monday's decision was not necessarily needed to re-enact the levies. Action by Congress appeared to hinge on whether the President insists that Congress find revenue to finance \$250,000,000 in parity payments, and \$150,000,000 for surplus subsidies, being considered in the Senate Agriculture Committee. (Washington Post.)

TRADE PACTS

Secretary Hull asserted yesterday that the report of the Commerce Department Saturday on the effects of the reciprocal trade program showed clearly the advantage it had over the German policy of subsidized barter and compensation trade. "Regimented foreign trade based upon the principle of bilateral balancing, implemented by barter or compensation arrangements, is fundamentally unsound," the Secretary said. (New York Times.)

Southern
Problems

The Southern Economic Journal (April) prints an address by Secretary Wallace, "The South Faces Changing Demands." "The fundamental difficulty," the Secretary says in part, "is that there are about twice as many farm people in the South today as at the close of the War between the States and the soil in the southeastern states is only about half as rich. The situation would be desperate indeed if there had not been developed new varieties, improved fertilizers and new methods of cultivation. These technical factors have offset in a very considerable measure the increased number of small farms and the poorer soil.

"During the past five or six years partly as the result of the Triple A program and partly as the result of the Farm Security Administration program, the soil has been definitely enriched in many areas by the increased use of lespedeza, cowpeas, Austrian peas, alfalfa, etc. Both the Triple A and the Farm Security Administration are encouraging in a positive way the increased use of gardens. Hundreds of thousands of human beings have been helped in a most extraordinary manner. And yet for long years to come the South will continue to be the nation's No. 1 economic problem, simply because the great farm population in the South means that the cropland per worker must necessarily be small.

"With a small number of crop acres per worker, the return per hour of labor with cotton at 10 cents a pound is probably not more than 10 cents an hour. On many farms in North Carolina in the year 1938 the return was much less than this. After the Triple A, the Farm Security Administration, the trade agreement folks, the Farm Credit Administration, and crop loans people have done all they can, it will be found that we are still faced in the South with a fundamental problem of more farm people than the land can support properly."

Lignin Treats

Hard Water

At the Agricultural By-Products Laboratory, Ames, Iowa, chemists of the Department treated hard city water, hard well water, and water containing added iron with lignin prepared from corn cobs and found this material to be effective as an iron-removal agent. Supplies of lignin are inexpensive because they are almost limitless.

The discovery promises the first extensive use for lignin in its original form, because few cities have water sufficiently pure that it does not require treatment for removing iron, which imparts an unsightly appearance and undesirable taste.

Iron in water is found in several forms, and while present methods of treatment are efficient in removing some of the forms of iron, only lignin gives good results with all of the forms, reports D. F. J. Lynch, who was in charge of the work at Ames and recently was named director of the Southern Regional Research Laboratory at New Orleans.

In treating water that contained about 36 parts per million of iron with 500 parts per million of lignin, the iron content was reduced to an average of about two-tenths of one part per million. The lignin was recovered and used again up to 10 times with no appreciable lessening of

efficiency. The same amount of an inorganic compound commonly in use reduced an identical iron content to only one and a half parts per million for the first six times it was used and thereafter rapidly lost its ability to remove the iron. The cheaper lignin powder not only removes more iron, but can be recovered and used more times, Mr. Lynch points out.

Trends in
the Sheep
Industry

"The number of stock sheep on farms and ranches on January 1 totaled 48 million head," says C. L. Harlan, Bureau of Agricultural Economics, in the Agricultural Situation (April). "Of this number approximately 34 million were in the Western States, and 14 million in the native sheep States. The number of western sheep is close to the high record established in 1934, and of native sheep the largest in 27 years. Two sections of the country set new high records in 1939--the West North Central States (excluding South Dakota) in the native sheep group, and Texas in the Western sheep industry. . . In the early days, the bulk of the industry was in the native States; now the western sheep are about 70 percent of the total number of stock sheep on farms and ranches.

"The long-time trend in numbers of native sheep was generally downward until about 1924. From 1924 to 1932 there was a rather sharp increase in numbers of these sheep, since then the numbers have varied little below or above the 1932 figures. In contrast, the trend of western sheep numbers was generally upward until 1909, downward to 1922, sharply upward through 1931, and has been little changed since that year. . ."

Forest
Machinery

"Five years ago most timber reached the shipping point on railroads, built by loggers deep into the forest," says Andrew R. Boone, in Scientific American (May), "but loggers recently have patterned their operations after the construction industry. Now, logs by tens of thousands are lifted by cables and towed through mud and snow on tractor-type trailers, or ride over solid truck tires and truck differential housings to forest roads cut by sharp-edged bulldozers. Only recently there appeared in Oregon two such machines built by the U. S. Forest Service, one a baby scarcely three feet wide, the other a snorting giant capable of building several miles of six-foot road between breakfast and dinner. By swinging two levers, the operator can convert this machine into either a water pump or an oil pump, for fighting fires or setting backfires when a logging camp is threatened.

"Unable to turn around on the narrow roads, trucks carry eight-wheel trailers on their backs to the loading points. There other machines pick up the trailers and set them down in the roadway. After the units are hooked together, heavy loads of logs are piled on for the rough journey out of the forest. Few of these are one-purpose machines. Diesel shovels may be excavating for a road today, loading logs tomorrow. Locomotive cranes, powered by steam, lift logs or right cars overturned in a wreck. Hundred-ton locomotives are passing, for each piece of today's forest machinery must be capable of handling several jobs to keep up the accelerating pace of logging."

Senate, Passed H.R. 5219, second deficiency appropriation
 Apr. 17 bill, 1939. As passed the Senate, this bill contains
 the following items for this Department: fighting forest
 fires, \$2,480,000; New England hurricane damage appropriation made avail-
 able for expenditure in New York to extent of \$60,000; Dutch elm disease
 eradication, \$100,000; enforcement of food, drug and cosmetic act, \$15,-
 000; administration of sugar act of 1937, \$6,500,000 (including reappro-
 priation); international production control committees, authorization
 increased to \$25,500.

Passed H.R. 4852, Interior Department appropriation bill, 1940,
 which had been reported with amendments on April 15, during adjournment
 (S.Rept. 282). The following amendments were agreed to: water conserva-
 tion and utility projects, \$5,000,000; reindeer industry, Alaska, \$820,-
 000.

The Special Committee to Investigate Unemployment and Relief reported
 with amendments S. 1265, the Byrnes bill to establish a Department of
 Public Works, to amend the social security act, etc. (S.Rept. 283).

Both Houses received a draft of proposed legislation from the Cen-
 tral Statistical Board providing for extension of life of the board;
 ref. Senate Com. on Commerce and House Com. on Expenditures in Execu-
 tive Departments.

Mr. Barbour submitted an amendment which he intends to propose to
 H.R. 5269, agricultural appropriation bill, 1940, to create in the Bureau
 of Animal Industry a Poultry Division.

Adjourned until April 19.

House, Considering bills on the consent calendar, passed
 Apr. 17 the following: H.R. 3955, amending A.A.Act to provide
 that wheat marketing quotas shall not be applicable to
 farms on which the normal production of acreage planted to wheat is less
 than 200 (now 100) bushels; H.J.Res. 258, amending A.A.Act to provide
 that increased payments are automatically denied unless the landowner
 presents proof to local committee; S. 518, authorizing \$500,000 annually
 for further development of cooperative agricultural extension work; H.R.
 2179, to ratify and confirm certain interest rates on loans made from
 the revolving fund authorized by agricultural marketing act; H.R. 3406,
 for forest protection against white pine blister rust; H.R. 3800, reduc-
 ing from \$10,000 to \$5,000 the maximum soil conservation payments.

(Prepared by Office of Budget and Finance.)

Removable A revolutionary development in plows is removable
 Plow Points points, so cheap you can afford to junk them when they
 get dull. You buy these plow points in packages and four
 of them will cost only half as much as an old-time plowshare resharpened
 three times. They fit on an inexpensive base and moldboard easily at-
 tachable to a tractor and it is said that their lighter draft will save
 10 to 20 percent in fuel. (Country Home Magazine, May.)

DAILY DIGEST

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Vol. LXXIII, No. 14

Section 1

April 20, 1939

EXPORT TRADE

Although the United States was the world's largest exporter in 1938 it suffered a decline of 7.6 percent in valuation of exports, according to a report in the New York Times. On the import side this country was the last on the list of major powers, with a decrease of 35 percent below 1937. These figures were made public yesterday by the Chamber of Commerce of the United States in a review of favorable and unfavorable developments in the United States foreign trade in 1938. Unfavorable world conditions, the chamber said, resulted in the first setback to the United States foreign trade since 1934. The review added that the world's trading nations generally had a poor foreign trade year in 1938.

DR. JACOB G. LIPMAN

Dr. Jacob Goodale Lipman, internationally known agricultural chemist, dean of the New Jersey State College of Agriculture, Rutgers University, and director of the New Jersey State Agricultural Experiment Station, died in New Brunswick, New Jersey, yesterday of a heart ailment, in the Middlesex General Hospital. He was 64 years old. (New York Times.)

WALLACE ON SUBSIDIES

Secretary Wallace indicated yesterday that the Administration was standing pat, in the face of strong opposition, on its proposals to reduce farm surpluses by paying bounties to encourage exports. He told a press conference "a compromise" solution to the cotton surplus problem was expected to be formulated within a few weeks. "I don't see how such a solution could meet objectives of President Roosevelt, in maintaining farm income and in economizing on Governmental outlay, without use of an export subsidy," Wallace said. (A.P.)

Argentina's Corn Crop

The Agriculture Department, estimating Argentina's exportable corn surplus at 160,000,000 bushels, reports that country's crop was expected to be larger than in the 1937-38 season, but still far below normal, says an Associated Press report in the Evening Star (Wash., April 19). "The first official estimate of the corn crop now being harvested in Argentina," it said, "is for a harvest of only 213,000,000 bushels. While considerably larger than the very low crop of 174,000,000 bushels harvested last season (1937-38), it is still 38 percent below the average of 346,000,000 bushels for the five years ended with 1936-37."

Chemistry
in Plant
Breeding

Albert F. Blakeslee, Carnegie Institution of Washington, is author of a paper in the American Journal of Botany (March) on the application of chemistry to plant breeding. Suggesting future research along this line, he says: "I want to have a method of inducing shoots to grow from any part of the plant--stem, root, or leaf. That this may be possible is suggested by the fact that certain species have this power to produce shoots to a marked degree. In *Datura*, moreover, the 17·18 chromosome when present as an extra induces abundant formation of adventitious leaves and shoots in continuous lines along the stem. The factors in this stimulus we have located in the ·18 half chromosome. . . We very much need chemical stimuli that will induce crossability or remove the block to crossability between species which we are attempting to investigate genetically. We need also methods to induce a continuation of growth after fertilization in certain wide crosses. Considerable progress has been made by different investigators in getting arrested embryos to develop through to seedlings... We do not know what the chemical differences are in the environment within the ovules and anthers which bring about the reduction divisions of chromosomes. . . We have frequently asked the *Drosophila* workers what makes the chromosomes behave the way they do in the salivary glands of their domesticated diptera so that they are 150 to 200 times their size in other parts of these insects. . . I want to see some method developed of growing fungous parasites such as the rusts on artificial media. . . With increasing knowledge of growth substances it ought not to be long before rusts are grown on agar in test tubes."

Direct Buying
of Livestock

Knute Bjorka, In the Agricultural Situation (April) writes on direct buying of livestock. "The most significant increases in the direct buying of livestock by packers have been with the concerns located in the northwestern Corn Belt," he says in part. "These packers also have expanded their slaughter operations relatively more than any other regional group of packers. The increase in slaughter in this area, however, has been primarily in the plants which are known as the 'interior' group. The operators of these plants buy most of their livestock direct. Packers in the eastern Corn Belt, the southwestern Corn Belt, and the South Central region also have increased their direct purchases of livestock. Packers in the Pacific Coast States buy a relatively larger proportion of their slaughter supplies direct than do packers in any other area but the volume of their slaughter is small in comparison with that of some of the other regional groups. Direct purchases also comprise a relatively large proportion of the total livestock purchased by packers in the South Atlantic and Inter-mountain areas but the slaughter in these areas is relatively small. Whether slaughterers buy livestock at public stockyards or direct depends to some extent on the location of their slaughtering establishments. In general, it has been the common practice for plants located at public stockyard markets to obtain their supplies at such markets rather than

obtain them by direct purchase at country points. Plants located away from public stockyards, on the other hand, usually obtain most of their supplies direct. In recent years, however, several important slaughtering plants located at public stockyards have obtained considerable livestock by direct purchase."

Drying Grain on the Farm

"The Bureau of Agricultural Engineering of the U. S. Department of Agriculture in cooperation with other bureaus and with state experiment stations, has for the past three years been carrying on investigations in the major wheat-growing areas to find what type of storage structures will best preserve and improve the quality of wheat stored on farms, and also the grades of wheat that can be safely stored for long periods," says C. F. Kelly, Bureau of Agricultural Engineering, in Agricultural Engineering (April). "...Some time has been spent in developing a portable small grain drying machine adaptable to use on the farm...In the grain drier being developed by the Department of Agriculture the heat is applied directly to the wheat rather than to air, and air is used only as a carrier of moisture and not of heat. The direct application of heat to the grain shortens the heating time and probably also increases the rate of diffusion of moisture to the surface of the kernel where it is quickly evaporated. When the surface of the kernel is cooled by evaporation and cold air, the interior does not cool immediately and has a higher vapor pressure than the surface, causing the moisture to move outward at a rate in proportion to the difference in vapor pressure...This type of drier is portable, has a low cost of construction and operation, a capacity of 100 bushels per hour, leaves the wheat in good condition for storage, and with careful attention to temperatures will not hurt the milling and baking qualities of the wheat, but may affect the germination..."

Nebred, A New Wheat

Nebred, a new Nebraska wheat which gives considerable promise, is the result of many years of painstaking experimental work at the Nebraska College of Agriculture. Nebred was grown under the station number, Nebraska 1063, until last fall when it was given the name "Nebred." In the cooperative wheat improvement program, Nebred has been tested in the central district or stations in Kansas, Nebraska and Colorado. In these tests it has been one of the highest yielding varieties at all stations. Nebred was selected chiefly for resistance to bunt. It is one of the most resistant varieties to all forms of bunt. In 52 different tests during 1932 to 1937 Nebred only had 2 per cent bunt infection compared to 45.1 per cent for Kharkof. While Nebred is not considered resistant to stem rust it seems to produce a fairly good crop of grain in the presence of rust. Nebred will meet with favor among the milling and baking industries. Dr. M. J. Blish, chief chemist of the Nebraska Experiment Station, makes the following statement about Nebred wheat: "Laboratory tests thus far conducted with Nebred have shown every indication that this wheat has excellent industrial utility..." (Grain & Feed Journals, April 12.)

House, Began debate on H. R. 3325, to continue powers re-
Apr. 18 lating to stabilization fund and dollar devaluation.

Received a supplemental estimate of appropriation, 1940, of \$316,330 for rendering closer and more effective the relationship between the United States and other American republics (H. Doc. 252).

The Committee on Agriculture reported the following with amendment: H. R. 169, to facilitate control of soil erosion and of flood damage originating upon lands within the Cleveland National Forest, Calif. (H. Rept. 424); H. R. 2009, to facilitate the control of soil erosion and/or flood damage originating upon lands within the Angeles National Forest, Calif. (H. Rept. 425); H. R. 2417, to facilitate control of soil erosion and/or flood damage originating upon lands within the Sequoia National Forest, Calif. (H. Rept. 426).

The Committee on Interstate and Foreign Commerce reported the following with amendment: H. R. 5379, amending the federal food, drug and cosmetic act so as to exempt certain drugs from labeling requirements (H. Rept. 428); H. R. 5762, amending the federal food, drug and cosmetic act by postponing the effective date of certain provisions (H. Rept. 429).

The Committee on Judiciary reported without amendment the following: H. R. 4372, to provide for punishment of persons transporting stolen animals in interstate commerce (H. Rept. 423).

The Committee on Public Buildings and Grounds reported with amendment the following: H. J. Res. 171, authorizing acceptance of certain lands on Government Island from Alameda, Calif., for use by the Department of Agriculture (H. Rept. 421).

The Senate was not in session. (Prepared by Office of Budget and Finance.)

Container Barrel & Box & Packages (March) in an article on
Studies the Forest Products Laboratory (Forest Service) says that
"the work of the laboratory in improving the strength and serviceability of boxes and crates has promoted the more efficient utilization of billions of board feet of lumber, and has led to savings to the consuming public, in freight handling charges, losses and damage to goods, amounting to millions of dollars a year. It is frequently possible to redesign a container so as to reduce the amount of material required, to save shipping weight and warehouse space, and at the same time to make it stronger and safer. The principal American wood species have been classified for box making, box designs have been standardized and specifications prepared for the proper number, size and spacing of nails. Through the cooperation of railway companies, box makers and shippers, the laboratory's findings and recommendations are widely used..."

DAILY DIGEST

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Vol. LXXIII, No. 15

Section 1

April 21, 1939

STOCKYARD RATE CASE The full bench of the Supreme Court, with four of the justices having been appointed by President Roosevelt, heard arguments yesterday on the plea of Secretary Wallace for the \$586,000 impounded after the court declared invalid last April the rates prescribed by Secretary Wallace for livestock commission men at the Kansas City Stockyards, says a report in the New York Times. The government, through Solicitor General Jackson, told the court that to distribute the money to the commission agents without affording Mr. Wallace a chance to correct the procedural deficiencies and issue a valid rate order, would bar the government, and through it the farmers, from the same fair treatment demanded by the court for the commission agents.

FORECAST OF SCIENCE A world of tomorrow that will compare with today as a 1939 automobile does with one of twenty years ago was forecast last night by Dr. Robert A. Millikan, physicist and Noble Prize winner, on the "assumption" that civilization will survive "man's present or prospective international wickedness, stupidity and folly." Dr. Millikan who spoke for science at a dinner to herald the opening of the World's Fair, prefaced his forecast with the statement that the primary reason for the profound changes in man's physical world in the last 150 years had been "the discovery and utilization of the means by which heat energy can be made to do man's work for him." "...Among the natural sciences biology has the opportunity to do the big new things so far as their immediate effect on human living is concerned, and I have no doubt that in the field of public health and control of disease, the cessation of the continuous production of the unfit, etc., big advances will be made but here I am not a competent witness, and I find on the whole those who are the most competent and informed, are the most conservative..."(New York Times)

COTTON BARTER The plan proposed by Senator James F. Byrnes for the bartering of American cotton and wheat for rubber and tin has been received with some skepticism by members of the commodity markets in England and in the Netherlands, according to a London report to the New York Times. The point is raised in both countries that as the countries which would be concerned--the United States, Great Britain, Holland and Belgium--all have free exchange, there is no necessity for a barter agreement.

Supreme Court Commenting on the AAA decision, the Baltimore Sun
AAA Decision (April 19) says editorially: "The Supreme Court's vali-
dation of the marketing quota provisions of the Agricultural Adjustment Act of 1938 seems to follow logically from the court's broad interpretation of the commerce clause of the Constitution in the National Labor Relations Board cases two years ago. In those cases the court took the position that a manufacturer who bought most of his materials in other States and sold a large proportion of his product across State lines was engaged in interstate commerce and, therefore, subject to Federal statutes enacted under the commerce clause to regulate labor relations. In passing on the tobacco quotas of which a group of Georgia growers had complained, the court appears to have interpreted the commerce clause in the same comprehensive fashion. Citing the fact that two-thirds of the tobacco sold at auction warehouses is sold for immediate shipment in interstate commerce, and the further fact that it is impossible to say when tobacco is put up for sale whether it is destined for interstate or intrastate commerce, the court held that Congress had power, under the commerce clause, to regulate the whole marketing process as an operation in interstate commerce. . . It is significant that this reversal was brought about not only by changes in the membership of the court through new appointments but also by the shift in the position of the Chief Justice and Mr. Justice Roberts, who voted with the majority against the control of agricultural production in the 1936 case, but who stood this time for the validation of agricultural marketing quotas. Thus we have a further indication of the way in which members of the court, on their own initiative, reinterpret the law and help to adapt the great principles of the Constitution to changing philosophies of government and public policy. . ."

Cotton The American Cotton Grower (April) contains an
Drying article, prepared by the staff of the U. S. Cotton Ginning Laboratories (Stoneville, Miss.) on the development by the laboratories of cotton driers. "There has been a quick increase in the number of driers installed in commercial gins in this country since 1931," it says. "That year there were 15 which handled 25,000 bales. In 1938 there were over 800, which handled almost 1,000,000 bales. About one-half of the drier-equipped gins of this country are located in the Mississippi Valley States. . . In a test at Stoneville, the average improvements in grade of cotton, . . . as a result of artificial drying, were more for the cottons 1 1/8 inches and longer than for the shorter staples. . . With late-season, trashy, dry cottons, the ginners find that driers are about as good as most cleaners in removing trash and improving the grade. . . The percentage germination of seed taken from portions of seed cotton that had been dried at test temperatures was not reduced by drying. On the contrary, they showed slightly higher percentages of germination. . . Fiber strength was not weakened by drying the seed cottons at temperatures up to 200° F., but there

appeared to be a slight weakening of the fibers when the material was dried twice at 250°. Staple length, on the average, was preserved when the cotton was dried at 150° F., but, in general, higher drying temperatures resulted in ginned lint with slightly shorter staple length. The money benefits per net bale from drying the green, damp, or wet cottons at 150° F. ranged, on the average, from 70 cents for the short staple cottons, to \$2.50 for the long staples.

Rural Tax Delinquency Maurice F. Neufeld, New Jersey State Planning Board, writes in the National Municipal Review (April) on tax delinquency in New Jersey. He says in part: "Since New Jersey contains approximately two million acres of non-productive rural lands, almost a half of which is tax delinquent, the State Planning Board has urged the state to acquire liens held either by private individuals or by municipalities when the lands represent desirable additions to present state parks and forests, or state refuges, fish and game lands, and water-shed areas. Other large parcels might be made the nuclei of additional public areas. The acquisition of tax title liens is useless, however, under existing methods for foreclosing the right of redemption and obtaining clear title. In New Jersey the cost of foreclosing tax delinquent property of little value ranges from \$200 to \$400. . . The planning board urged, in the absence of rural zoning, that the county administrations, county agricultural agents, the State Agricultural Experiment Station, and the State Department of Agriculture cooperate in discouraging the use of certain types of land for agricultural purposes and in keeping other types open only to agriculture of a particular kind. This rational process, when approved by law, is rural zoning. The only strictly rural zoning ordinances operating in the United States today are those in the twenty-five northern and central counties of Wisconsin. More than five million acres of land unfit or unneeded for agriculture have been restricted. Rural zoning in Wisconsin, always preceded by long months of discussion and study, and finally enacted only with the approval of the citizens of the county, must be described as an unbelievable democratic victory of organized knowledge over individual ignorance.

Boxes and Crates "American Wooden Boxes and Crates" is a new booklet issued by the United States Department of Commerce that discusses new developments and current applications of sawed wooden containers in the agricultural field for fruits and vegetables. The booklet, containing 35 pages and well illustrated, is available from the Superintendent of Documents, Government Printing Office, Washington, D. C., for 10 cents a copy. Twenty-five percent discount for orders of 100 or more. (News for Farmer Cooperatives, April.)

Rural Sales Daily average sales of general merchandise in small towns and rural areas for March were about 17 per cent above March, 1938, and 15 per cent above February, 1939, the Commerce Department said. (A.P.)

Senate, The Committee on Agriculture and Forestry reported
Apr. 19 without amendment S. 1579, to extend the time during
 which marketing agreements and orders may be applicable
to hops.

Mr. Pepper submitted an amendment which he intends to propose to H. R. 5269, agricultural appropriation bill for 1940, to provide \$1,000,000 for emergency erosion control (under S. C. S.) in Everglades region, Fla.

Mr. Wiley submitted an amendment which he intends to propose to H. R. 3800, reducing the limitation on A. A. A. payments from \$10,000 to \$5,000.

House, Passed as reported H. R. 5762, to provide for tem-
Apr. 19 porary postponement of the operations of certain pro-
 visions of the Federal Food, Drug, and Cosmetic Act. De-
bated H. R. 5379, to amend the Federal Food, Drug, and Cosmetic Act so
as to exempt certain drugs from labeling requirements.

The Committee on Military Affairs reported without amendment H.R. 3364, to transfer the Park Field Military Reservation, Tenn., from the War Department to the Department of Agriculture. (H. Rept. 432.)

Mr. Murray criticized the effect of trade agreements on American fur farming. Mr. Boren spoke in favor of increased appropriations for transoceanic service by the Weather Bureau.

Production Lynn Copeland, American Jersey Cattle Club, in an
Records article on herd management and herd production, in the
 Journal of Dairy Science (April) says: "...Every
official production record on a registered cow of any breed possesses
many values. First, it indicates the economic worth of the cow as a
producing unit in the herd. Then a production record on an animal
furnishes some information as to her transmitting ability to her sons
and daughters. Furthermore, the record of the cow assists in proving
both her sire and her dam. Likewise the butterfat percentage for the
lactation and the persistency of production are valuable for study
with the view of maintaining or increasing the average test of the herd
and in improving persistency. Also, good production records possess
considerable advertising and publicity value and such records add to
the sale price of both the cow and her progeny. In addition to the
individual records, the information each year on the herd average in-
cluding the average fat percentage of the herd, breeding efficiency,
length of dry periods, services required per cow and the average age
of the herd are all of value to the breeder who will study and use such
data in trying to do a really constructive work of breeding better
dairy cattle..."

Synthesis of Science Service (April 13) reports that vitamin B₆
Vitamin B₆ has now been completely synthesized in the chemical
 laboratory. The vitamin which has been built up from
chemicals occurs naturally in yeast, rice polish and other whole grains,
liver and certain other foodstuffs. This part of the vitamin B complex
is known as the rat antidermatitis or rat antiacrodynia factor because
rats that do not get enough of it in their diet develop skin diseases.

DAILY DIGEST

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Vol. LXXIII, No. 16

Section 1

April 24, 1939

COTTON BOUNTY

President Roosevelt and Southern Senators have agreed on a bounty of about 2 cents a pound on both raw cotton and manufactured cotton goods sold abroad. Senator Bankhead of Alabama, who announced the compromise agreement, said the subsidy would be used in an endeavor to sell first this year's cotton crop and cotton outside the government's loan stocks. President Roosevelt had suggested a subsidy to reduce the more than 11,000,000 bales of staple piled up under government loans, but Southern Senators contended this might lower the market for this year's crop. "The revised program is a practical operation of the cotton export subsidy announced by the President," Senator Bankhead said. "Our present plan will leave all new cotton crops in free channels of trade," he said. "I feel certain that the domestic price for this season will be stabilized at around 9 cents a pound." (A.F.).

SCIENCE MEETINGS

Washington becomes the world center of science this week with the annual meetings of the National Academy of Sciences, American Physical Society, American Geophysical Union, American Association of Radio Engineers, American Meteorological Society, and the Medical Society of the District of Columbia. The scientific meetings of the National Academy will be held today and tomorrow with reports on recent developments in their laboratories presented by some of the leading scientists of the United States and Europe. This evening there will be a public lecture by Sir William Bragg, president of the British Association for the Advancement of Science, on the historical collections of the British Royal Society, dating from the days of Sir Isaac Newton. On Wednesday will start the annual meeting of the American Meteorological Society, at which some of the first reports will be made on the Bankhead-Jones fund projects of the Department of Agriculture. (Washington Star.)

DUTY ON REICH GOODS

"Countervailing duties imposed by the United States upon subsidized German exports became effective Saturday," says Thomas F. Healey in the New York Times. "...Henceforth, all dutiable German items entering the United States will be subjected to a countervailing or penalty duty of 25 percent of the invoice value in addition to the normal duty before they can be released from customs custody. On subsequent examination, if it is found that no subsidy was paid by the German Government to the exporter, the 25 percent penalty impost will be refunded. If the subsidy is found to be less than the 25 percent penalty, then the difference will be refunded. Contrarily, if the subsidy is found to exceed the penalty, the excess must be paid to the Customs Bureau."

1939 Loans
on Wool

The National Wool Grower (April) commenting on the announcement by the Commodity Credit Corporation regarding the 1939 wool loans, says: "While this announcement was made two weeks later than last year, it had been generally expected, and although wool prices were becoming somewhat weaker, practically no sales were made in the country at less than the amount that can now be borrowed. It seems fully certain that this year's loan will again be effective in maintaining minimum prices. . . The official announcement shows that over 82 million pounds were loaned upon last year. However, this included a large volume of wools of the 1937 clip. If only 40 or 50 million pounds of the 1939 clip actually take loans, it will afford a valuable stabilizing factor to the market. However, with conditions as they are at present, it is probable that a much larger tonnage will be loaned upon this year. . . At no time has there been any talk of taking any losses in connection with wool loans. This all goes to show that the plan brought into effect under the 1938 law and administered as it was in the case of wool can afford valuable support to producers in marketing their commodity, and with no risk of loss on the part of the government."

Casein in
Plastics

Dr. D. C. Carpenter, chemist at the New York Experiment Station, Geneva, asserts that most plastic materials now found on the market are made from chemicals derived through the ingenuity of man and are thus largely independent of agricultural surpluses or wastes. For this reason, he believes the development of a casein plastic industry, using new and more rapid methods of manufacture, could do a great deal for the dairy industry and points out this would provide an outlet for vast quantities of skim milk as a ready source of casein. "Casein plastic is now produced by essentially the same process used 70 years ago which required from four to eight months as compared with a few seconds time required to manufacture some of the newer types of plastics," states Dr. Carpenter in the station's quarterly magazine. "With a huge milk surplus from which to supply casein, it should be of importance to every one interested in the dairy industry that an outlet exist for his waste skim milk as casein plastics, providing the manufacturing process can be improved and speeded up." An intensive study has been made by Dr. Carpenter for the past several years on the chemical and physical properties of milk casein, with particular emphasis as to how these properties might be utilized to best advantage in manufacturing casein plastics. (Southern Dairy Products Journal, April.)

Hybrid Corn

Iowa corn breeders are now offering seed of a new hybrid, No. 13, which stays green and grows in spite of drought. Clyde Black, of Ames, reports that this drought-resisting hybrid produced 25 bushels of grain per acre in parts of southern Iowa and Missouri where the weather was so dry that the ordinary varieties yielded nothing but fodder. No one knows how this corn gets along so well on so little water. (Country Home Magazine, May.)

Ecology in. Herbert C. Hanson, Agricultural Experiment Station,
Agriculture Fargo, North Dakota, writing in Ecology (April) says:

"The major emphasis in ecological research, by ecologists, has been on native or wild plants and animals and not on cultivated plants and domesticated animals. Human ecology has also been largely untouched by ecologists. Scientists in other fields such as agronomy, horticulture, pathology, geography, sociology, and economics have not only been making increasing use of ecological concepts and procedures, but have been urging ecologists to broaden the scope of their investigations and teaching, so as to include the whole gamut of life in relation to the environment. The value of men who have been well trained in ecological technique and thinking has been long appreciated in forestry and range management, but now the call for help is coming from numerous additional fields. . . Permanent agriculture must be in adjustment with the environment. The United States is passing from its pioneering stage into more advanced stages. In too many regions, however, pioneering or invasion will be repeated, but it is hoped that it will be based upon a sounder knowledge of the environment. Stabilization of agriculture to the environment requires the services of scientists in many fields. The special contribution of ecology is to ferret out relationships with the environment so that man, using this knowledge in conjunction with that obtained from other fields, can strive intelligently to secure balance and stabilization, a goal essential for the attainment of the 'abundant life' and the building of a culture far beyond our present dreams."

This publication also contains an article, "Improvement of Unproductive and Abandoned Peatland for Wildlife and Related Uses" by A. P. Dachnowski-Stokes, Bureau of Chemistry and Soils.

Apple F. J. Keilholz, extension editor, University of
Spray Illinois, writing in Country Gentleman (May)
part: "A new nicotine preparation may be the all-im-
portant spray which apple growers have been seeking as a substitute for arsenate of lead in controlling codling moth. . . It is nicotine bento-
nite. Announcement of the new spray culminates some of the first work done on this problem as early as five years ago by the Illinois State Natural History Survey and the Illinois Experiment Station. These tests, together with those of the U. S. Department of Agriculture and some in other states, have shown sufficiently good results to warrant the use of this spray by orchardists who wish to avoid cleaning the fruit with an acid wash. . . By the use of this new spray the expensive washing of apples, necessary when lead arsenate is used, may be eliminated or simplified. First costs of the nicotine spray are more than that for lead arsenate. However, with less 'stung' fruit and the doing away with part of the cost of washing, total savings generally offset the extra cost of nicotine."

Senate, Concurred in the House amendment to S. 518, to provide for the further development of cooperative agricultural extension work. The House amendment reduced the amount from \$500,000 to \$300,000. This bill will now be sent to the President.

Considering bills on the calendar, the Senate passed the following: S. 1579, to extend the time during which orders and marketing agreements under the A. A. Act may be applicable to hops; H. R. 3537, to extend the facilities of the Public Health Service to active officers of the Foreign Service of the U. S. (an amendment by Mr. Bilbo, to extend the provisions of the bill to employees of the Agriculture and Commerce Departments stationed abroad, was agreed to);

H. R. 3134, amending the act authorizing detail of U. S. employees to foreign countries so as to permit the crediting of any reimbursements from such governments to the appropriations from which the expenses were made. (this bill will now be sent to the President).

Adjourned until Monday, April 24. . . .

House Defeated H. R. 5379, to amend the Federal Food, Drug, and Cosmetic Act so as to exempt certain drugs from labeling requirements, by a vote of 118 to 234.

The Committee on Labor reported with amendment H. R. 2990, to make the C. C. C. permanent.

House Passed H. R. 3325, to extend the time during which the powers relating to the stabilization fund and the alteration of the weight of the dollar may be exercised. A motion to recommit the bill was defeated by a vote of 158 to 225.

The Committee on Agriculture reported without amendment H. R. 5911, to amend section 344 (h) of the Agricultural Adjustment Act of 1938, relating to cotton acreage allotments. (H. Rept. 457).

The House adjourned until April 24.

The Senate was not in session.

(Prepared by Office of Budget and Finance.)

P. V. Cardon P. V. Cardon, in charge of forage crops research Promoted in the Bureau of Plant Industry since 1935, has been named Assistant Chief of the Bureau, according to an announcement by E. C. Auchter, Chief. Mr. Cardon holds degrees from both the Utah State Agricultural College and the University of California, and has had long experience in crop research and administration. He served in the Bureau of Plant Industry from 1909 to 1920, working successively with cereal, cotton and dry-land agricultural problems. Later he was Professor of Agronomy and Agronomist of the Montana State College and Agricultural Experiment Station, Director of the Southern Branch of the Utah Agricultural College, Editor of the Utah Farmer, Farm Economist of the Utah Agricultural Experiment Station, and from 1928 to 1935, Director of the Utah Agricultural Experiment Station.

DAILY DIGEST

prepared in the Press Service, Office of Information, U. S. Department of Agriculture to present items of interest to agriculture and to agricultural workers. Views and opinions in these items are not necessarily approved by the Department.

Vol. LXXIII, No. 17

Section 1

April 25, 1939

BARTER PROGRAM

Secretary of State Hull disclosed yesterday that the United States already had begun negotiations with Great Britain, Belgium and the Netherlands for a huge exchange of surplus American cotton and wheat for rubber, tin and other war materials. He indicated that the deal might be far larger than first reported. Senator Byrnes of South Carolina made known two weeks ago that the plan was under consideration, and said it was hoped that 2,000,000 bales of cotton might be traded. Mr. Hull revealed, however, that the instructions sent to Ambassador Joseph P. Kennedy in London had mentioned a surplus here of 11,000,000 bales of cotton and 80,000,000 bushels of wheat as the basis on which Mr. Kennedy could work. The Ambassador was informed that this government believed it could get title to this amount of cotton and wheat, which is already deposited with it as loan collateral. (A.P.).

COTTON FUTURES

The price of cotton bounded upward yesterday in the futures market, says an Associated Press report from New York. Under a wave of orders from abroad--something of a phenomenon in recent months--the price of cotton to be delivered next March jumped \$1.85 a bale soon after the opening gong to hit \$39.40 a bale. Other futures also advanced. Later in the day prices receded somewhat as traders took profits, but quotations were relatively high at the end of the day's session, up 80 to 95 cents a bale.

FARM YOUTH CONFERENCE

The possibility that one day United States cities will be forced to bar jobless "immigrants" coming from the Nation's farms was suggested by a Department of Agriculture economist yesterday to a national conference on problems of farm youth yesterday in Washington. "Some states will repel rather than attract rural youth," O. E. Baker, senior agricultural economist, told the conference of 30 leaders of farm youth organizations. "Cities as well as states, such as California, may also put barriers in the way of immigrants likely to go on relief." (Washington Post.)

MILK PACTS

A battle between the government and handlers of milk over the constitutionality of the agricultural marketing agreement act of 1937 and orders issued under it by Secretary Wallace began in the Supreme Court yesterday. (New York Times.)

**Farm Credit
Progress**

"Development of the services of the farm credit administration since 1933 have had a very beneficial effect on the rural credit situation in Montana," says an editorial in the Montana Farmer (April 15). "While conservative policies are necessarily being followed, the general effect of the land bank operations has been to reduce the going rate of interest on new loans by about 50 percent. A particularly substantial reduction in interest rates has occurred in the short term credit field through the operation of the production credit associations, and these loans have been established on a very practical basis. Funds are advanced to the approved borrower as he needs them to carry on seasonal operations and interest is charged only for the period during which the funds are in actual use. . . But the rural credit field in Montana has by no means been surrendered entirely to the farm credit administration agencies. Commercial banks in some districts are becoming somewhat active in making short term farm loans at rates of interest considerably lower than a few years ago. And in the long term credit field it is reported that some of the insurance companies are starting to make some loans in the more stable farming areas. The reduction of interest rates on farm loans is one of the substantial benefits farmers have derived from this trying period of agricultural adjustment."

**D.H.I.A. Work
at Record**

Dairy herd improvement association work in the United States has reached an all-time peak. More associations are now operating and testing more cows than ever before. Twelve hundred and twenty-eight dairy herd improvement associations were in operation on January 1, 1939, with 625,284 cows on test. This is an increase of 122, or 11 per cent, in number of associations and an increase of 66,291, or 11.9 per cent, in number of cows on test, as compared to the number on January 1, 1938, when there were 1,106 associations with 558,993 cows on test. Thirty-three states gained in number of associations and 37 states gained in number of herds tested. Wisconsin, with 154 associations consisting of 3,604 herds, leads the states in number of associations in operation and number of herds tested. New York is second with 129 associations consisting of 2,807 herds, and Pennsylvania is third with 102 associations consisting of 2,286 herds. California, with 89,383 cows on test, leads the states in number of cows being tested. New York is second with 70,812 cows on test, and Wisconsin is third with 69,206 cows. California, with 13.5 per cent of her cows on test, has a larger percentage of cows on test than any other state. Utah, with 417 herds on test, has a larger percentage (23.6) of herds on test in comparison with the number of herds of 11 cows or more, than any other state. (Hoard's Dairyman, April 25.)

Trade ". . . Those who believe that their own economic
Barriers troubles can be cured by shutting out their neighbors'
 wares should study a new bulletin titled Barriers to In-
 ternal Trade in Farm Products, just issued by the Bureau of Agricultural
Economics," says an editorial in Country Gentlemen (May). "It is a com-
prehensive document, and it tells a sorry story of the way many states
and cities have succeeded in circumventing the Federal Constitution. More
than 150 years ago free trade was guaranteed among the states; yet today
the natural movement of farm products has been sharply curtailed by spe-
cial taxes, by embargoes and discriminatory inspection fees, by the abuse
of labeling and inspection laws. Until twelve or fifteen years ago oleo-
margarine was about the only product which suffered seriously from such
restrictions. Then came a great mass of legislation curtailing the sale
of dairy products, particularly milk and cream. Dairy legislation was
of course needed to protect public health, but many of the laws were so
fashioned as to exclude producers in other regions. . . During the past
decade these back-yard wars among the states have spread to a host of
other agricultural products. Investigators who compiled the report
found that practically everything grown on American farms is now affect-
ed in one way or another by restrictive state laws and city ordinances.
Nearly every state is involved. . . We can call a halt on this type of
legislation and continue to be the unified nation we have always been.
Or we can pile barrier upon barrier until, so far as commerce is con-
cerned, we become a collection of forty-eight principalities each guard-
ing its borders. . ."

Dust Bowl "The wettest spring since 1931 in a three-State area
Revival including part of Colorado, Oklahoma and Kansas, where
 soil erosion had taken heavy toil for four years, has
started a back-to-the-Dust Bowl migration," reports A. R. Buckingham in
a Dodge City (Kans.) dispatch to the New York Times. "The wet spring,
which followed a summer and fall of heavy rains, soaked the subsoil with
moisture which in High Plains agriculture is crop insurance. Fields
that were bare of vegetation five years ago are covered with grass or
wheat. Weed growth is prolific. Even the worst eroded ranges are in
grass again. A stretch of the Oklahoma Panhandle is carpeted with
wheat. The returning families, which number more than 200 in segment
of the tri-State area, have reestablished themselves on farms because
they believe another cycle of wet years has begun. . . County farm agents
and business men who have stayed with the High Plains in the drought and
dust years believe most of the migrants will succeed. The basis for
this opinion is the fresh impetus on better balanced agriculture. Gov-
ernment aid in establishing a grain farmer as a stock raiser on a small
scale, as well as financial backing in irrigation, has helped to raise
the standard. The wheat-only farmer of ten years ago has become a
financial liability, and unless he changes his crop practices to conform
with the new ideas in agriculture he gets little encouragement. . ."

Penn State Dairy Herd By using registered stock and following a definite breeding program, the average production per cow of the dairy herd at the Pennsylvania State College has been increased by almost 6,000 lbs. since the herd was started in 1890. According to A. A. Borland, head of the department of dairy husbandry, the average production per cow for the 5-year period from 1891 to 1895 was 4,720 lbs. milk containing 226 lbs. fat. Since then, production has increased steadily. The averages for the year 1937-38 were 10,235 lbs. milk and 391 lbs. fat. Every milking from each cow has been weighed since the herd was started. Each cow's milk is tested monthly to determine the per cent of butterfat. The feed consumption of each cow is also recorded. Superior proved sires are used. Each proved sire has five or more daughters showing a substantial increase of milk and butterfat production over their dams. The average production of milk per cow in Pennsylvania is less than half that of the cows in the Penn State herd. (Hoard's Dairyman, April 25.)

USDA Workers Honored Among eight men elected as honorary members of the Horticultural Society of New York, as a tribute to their outstanding contributions to horticulture in the United States, are two members of the Department. Dr. David G. Fairchild, member of the United States Bureau of Plant Industry since 1889 until his recent retirement as senior agricultural explorer, is known throughout the horticultural world for his introduction of new ornamental and edible trees, shrubs and herbaceous plants. B. Y. Morrison, principal horticulturist in charge of the Division of Plant Exploration and Introduction of the United States Bureau of Plant Industry since 1934, was acting director of the National Arboretum in 1937, and since 1926 has been widely known as the editor of the National Horticultural Magazine. He has also been active in the development of plans for a National Botanic Garden in Washington, D. C. (New York Times.)

Consumer Purchase Study Volume I, "Family Income in Chicago (1935-36)", of "Study of Consumer Purchases: Urban Series," has recently been released and may be purchased from the Superintendent of Documents for 25 cents. This is the first of a series of reports on annual incomes and expenditures of urban families in the United States and contains data secured from a survey conducted by the United States Bureau of Labor Statistics and the Bureau of Home Economics in cooperation with other government agencies. It is Bull. 642.

Farm Cash Income The Department of Agriculture estimated that in March farmers in the United States received cash income, including government benefit payments, of \$582,000,000, an increase of 13 per cent over February's estimated \$486,000,000. Normally the trend of farm income is downward from February through March, but this year sales of livestock and livestock products were large. The government benefit payments amounted to \$95,000,000. Farm cash income for the first quarter of this year was estimated at \$1,687,000,000, against \$1,679,000,000 for the same period last year. Government payments were \$192,000,000, against \$108,000,000. (A.P.)

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Vol. LXXIII, No. 18

Section 1

April 26, 1939

GOVERNMENT

REORGANIZATION In his first reorganization order to Congress yesterday, President Roosevelt recommended merger of scattered units into three major independent agencies, together with a regrouping of budget and research work under his own supervision at the White House. Many of the activities created under the Roosevelt administration, together with some long-established bureaus, would be brought together into a Federal Security Agency, a Federal Works Agency and a Federal Loan Agency. The President estimated the savings in administrative cost at between \$15,000,000 and \$20,000,000 a year. Under the reorganization act, if no opposition develops, the President's plan would become effective at the end of the 60 days without affirmative action. The component parts of the three new agencies are set forth in the order as follows:

Federal Security Agency--Social Security Board, now independent; U.S. Employment Service, now in Labor Department; Public Health Service, now in Treasury; National Youth Administration, now a part of W.P.A.; and Civilian Conservation Corps;

Federal Works Agency--Bureau of Public Roads, now in Agriculture Department; Public Buildings, branch of the Treasury, Procurement Division; buildings management branch of the National Park Service; U.S. Housing Authority, now in Interior; and Public Works Administration, now in Interior; W.P.A., now independent, is transferred to the new agency, but with its identity retained for the time being under the title of Work Projects Administration;

Federal Loan Agency--Reconstruction Finance Corporation; Electric Home and Farm Authority; Federal Home Loan Bank Board; Federal Housing Administration and associated agencies and boards, including the Export-Import Bank of Washington.

Other independent lending agencies set up since 1916 are transferred to the Agriculture Department. These are: Farm Credit Administration; Federal Farm Mortgage Corporation; and Commodity Credit Corporation.

The agencies that would go under the direct supervision of the Executive: Budget Bureau, from the Treasury; Central Statistical Board, made a part of the Budget Bureau; National Resources Committee, now independent; Federal Employment Stabilization Office, taken from Commerce Department and made part of the Resources Committee, with its name changed to National Resources Planning Board. (Washington Star.)

Economics Bibliography The International Institute of Agriculture in Rome has now begun to publish a current bibliography, at quarterly intervals, which deals with the economic and social aspects of agriculture, such as agricultural economics, agricultural policy, settlement, credit, cooperation, insurance, marketing, prices, statistics, farm organization and management, valuation, labor, accounting, rural sociology, agricultural history and geography, legislation and education and all other agricultural problems, in so far as they are considered from the economic and social point of view. All languages receive equal treatment. The bibliography is carefully classified by subjects. (Journal of the American Society of Farm Managers and Rural Appraisers, April.)

Carload Cold Locker Perhaps the biggest cold storage building on record will be erected as part of the \$4,000,000 perishable food market planned for the Kansas City, Kansas, levee. There will be lockers for individual users, but most of the lockers will have a capacity of a carload of produce and are designed primarily for wholesalers and brokers in food products. The cold storage building will cost \$658,000. (Business Week, April 22.)

Soybean Planter Farm Implement News (April 20) reports a new soybean planter attachment for corn planters. "With an investment of less than \$20," it says, "a man can get an attachment for his corn planter that will enable him to plant twin rows of soybeans with 30 inches separating the twin rows and 6 inches between the double rows. The beans themselves crowd out the weeds in the twin rows, while the farmer's own corn plow will take out the weeds in the middles and keep the field clean. Thus by virtue of a simple inexpensive attachment for a tool every farmer already owns in soybean territory, it is possible to raise practically a weed-free cultivated crop of beans. Combining is much easier, incidentally, when the reel does not have to climb over those looming horse weeds. The idea of twin rows is new in soybean practice but not in potatoes. Quite a bit of development has been done on twin-rowed spuds down East not only by machine men but by government men on experimental farms. The system seems to hold great promise except for the fact that in potatoes it calls for new special equipment. The soybean planter attachment avoids this high-cost factor..."

"Consumer Movement" The April 22 issue of Business Week contains a 13-page report on "The Consumer Movement," number 16 of a series of special reports on "current business opportunities, problems and trends of outstanding significance." Included are lists of national consumer organizations, government agencies, periodicals, services, books, studies and reports.

Future
Trees

"Future forests of the nation depend largely upon what we are doing now, especially in the selection of the trees that are to be their parents, Leon S. Minckler of the Appalachian Forest Experiment Station points out in the current issue of the Journal of Forestry," says Dr. Frank Thone, Science Service Writer. "Application of the science of genetics to trees has lagged far behind the uses of genetics in other fields, he declares. This is only natural, perhaps, because a generation in trees is almost as long as it is in the human race, so that geneticists have found annual plants, like beans and wheat, more to their liking. And foresters have had so many other, more pressing problems that they have let tree-breeding problems wait. . . Relatively little of American reforestation is done by planting seeds or setting out nursery seedlings. Much more usual is the practice of leaving seed trees standing when a piece of land is logged off. The selection of these seed trees would therefore seem to be of supreme importance. Yet too often the worst instead of the best trees are left, because lumber interests hate to 'waste' a tree that will make profitable logs. Using cripples and runts for tree breeding is just as bad forestry as sending the best young men to war to be killed and leaving runts and defectives as fathers of the next generation is bad eugenics. However, even the abandonment of such bad seed-tree selection is not enough, Mr. Minckler emphasizes. We must not only avoid poor seed trees. We must intelligently select those that show the best qualities, and that give promise of being able to transmit those qualities through their seed to the next tree generation."

Congress of
Agriculture

The Experiment Station Record states that the eighteenth International Congress of Agriculture will be held in Dresden from June 6 to 12, under the auspices of the International Confederation of Agriculture. It will be organized into sections of agrarian policy and farm management; agricultural instruction and propaganda; agricultural cooperative societies; cultivation of plants; viticulture, fruit growing and the cultivation of special plants; animal production; agricultural industries; rural life and the work of the countryman; and agricultural sciences (including the organization and encouragement of research in the field of agriculture). (Science, April 21.)

Civil Service

The Civil Service Commission announces the following examination: No. 42, unassembled, assistant librarian, \$2,600, Department of Justice. Applications must be on file not later than (a) May 22, if received from States other than those named in (b); (b) May 25, if received from the following States: Arizona, California, Colorado, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Washington, Wyoming.

Senate
Apr. 24

Mr. Schwellenbach submitted amendments which he intends to propose to H. R. 5269, agricultural appropriation bill, as follows: marketing farm products, increasing from \$418,970 to \$518,970; crop and livestock estimates, increasing from \$642,799 to \$792,799; market news service, increasing from \$1,122,302 to \$1,372,302.

Mr. Vandenberg inserted in the Record an amendment which he intends to propose to S. 2202, to establish a Public Works Agency, "for the purpose of unifying all relief under State...responsibility supported by Federal grants-in-aid."

House
Apr. 24

Agreed to conference report on H. R. 4630, War Department military appropriation bill.
(Prepared by Office of Budget and Finance.)

Soil Saving
Cooperation

"Dr. Hugh H. Bennett, chief of the Soil Conservation Service, knows how to drive home with dramatic force the meaning of our reckless method of farming," says an editorial in the New York Times. "Even the most unimaginative mind must be impressed by his declaration before the House Labor Committee that 'we are losing every day, as a result of erosion, the equivalent of 200 forty-acre farms' that the good earth thus whirled off is 'gone, gone forever'--with the wind and the water. . . The work to be done has been thoroughly discussed in a dozen government reports. Though the character and extent of the damage are well known, intensive surveys must be made which will take years. The Federal Government must continue the policy of purchasing and rehabilitating scattered crop farms and converting them into grazing ranges. Farms must be increased in size with the aid of government credit in the interest of higher agricultural efficiency. Water must be caught and distributed by means of properly designed irrigation systems. The States must do their share by encouraging grazing associations to operate large tracts as units, by permitting qualified property-tax-paying owners to form soil conservation districts, by formulating taxation policies suited to the new economic and social conditions, and by reforming the old leasing system. Action is needed which calls for voluntary cooperation and a sacrifice of old privileges, but which nevertheless makes heavy demands on local initiative and self-reliance."

Agronomy
Articles

The following articles appear in the April issue of the Journal of the American Society of Agronomy:
"Soil-Conserving and Soil-Improving Crop Rotations for the Palouse", by Sam L. Sloan, Arden W. Jacklin, and Verle G. Kaiser, all of the Soil Conservation Service; and "Dodder Control in Lespedezas" by R. E. Stitt, Division of Forage Crops & Diseases, Bureau of Plant Industry.

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Vol. LXXIII, No. 19

Section 1

April 27, 1939

WALLACE ON BARTER PLAN The Administration's plan to barter wheat and cotton in exchange for rubber and tin was declared by Secretary Wallace yesterday to be of the utmost strategical importance to the national defense, according to a report in the New York Times. The State Department, he said, had long been concerned over insufficient supplies of those commodities and had discussed the problem of increasing them long before the barter proposal was formulated. This government might, should the necessity arise, extend credits to Brazil in the event that that country should turn to rubber planting to make up for any loss it might suffer in the world's cotton markets as a result of United States barter agreements respecting the exchange of cotton for rubber or tin, Mr. Wallace indicated. He asserted that in no conceivable respect did the barter proposal run counter to the principle of Secretary Hull's trade agreements.

1938 EXPORT BALANCE The major development in connection with the United States balance of payments in 1938 was an increase of \$1,068,000,000 in the country's export trade balance, which for the year was \$1,133,000,000--the highest in seventeen years. The heavy inflow of payments was largely due to gold imports and a large excess of receipts from foreign business men and other debtors to American traders. A sharp decrease in merchandise imports was a major factor, being 36 percent less in value than in 1937. On the other hand, American exports were reduced in value by only 8 percent compared with 1937. (New York Times.)

CITRUS RATE BOOST DENIED An Interstate Commerce Commission examiner yesterday disapproved a proposal by the railroads to increase substantially charges for transporting citrus fruits from California, Arizona, Texas and Florida to destinations throughout the country. The railroads proposed to revise estimated weights on citrus fruits loaded in containers. Citrus fruits now are moved on an estimated weight basis, but tariff experts in the commission said that most of the estimated weights are under actual weight. Examiner Paul O. Carter estimated that the increase in transportation charges which would result from the railroads' proposal would exceed \$3,800,000 annually from California and Arizona, about \$176,000 annually from Texas and between \$500,000 and \$700,000 annually from Florida. (A.P.).

"Top Cross"
Poultry "Recent experiments at the Iowa station have modified the breeding technique used to produce hybrid corn in such a way that 'top-cross' chickens have been developed which show a great improvement in fertility, hatchability, and livability to 24 weeks of age," says N. F. Waters (formerly of the Iowa Experiment Station, and now of the Department's Poultry Research Laboratory, East Lansing, Mich.) in the Poultry Tribune (May). "Actually the 'top-cross' birds laid eggs which were 9.8 percent more fertile, hatched 5 percent better, and the chicks lived 5.5 percent better up to 24 weeks of age than did the eggs and chicks from random-bred (flocks mated in the customary way) White Leghorns. These results extended over a five-year test period and demonstrate, for the characters studied, that when highly inbred White Leghorn males are crossed with random-bred White Leghorn females of average or better performance, their progeny will show marked superiority. The writer believes the results obtained at the Iowa State College Experiment Station suggest that breeding procedures which have so revolutionized corn breeding may be applied to poultry breeding, and thus help to reduce the losses incurred during the first six months of the growing period. Any poultry breeding method which will reduce mortality 20.3 percent from the time the egg is fertilized up to the twenty-fourth week is well worth the attention of the poultry breeder. . ."

Farm Loan More than \$114,100,000 or nearly 15 percent of the
Repayments land bank commissioner money borrowed by farmers under
 the emergency farm mortgage act of 1933, largely on
second mortgage security, was repaid by the end of 1938, according to a statement by Gov. F. F. Hill of the Farm Credit Administration at the opening of a conference in Washington of the presidents of the 12 Federal Land Banks. Governor Hill said the land bank commissioner loans had been made to approximately one in every thirteen farmers in an aggregate amount of \$967,017,000 to the end of 1938; and that 37,828 loans aggregating \$49,647,000 had been paid in full and an additional \$52,059,000 of principal had been retired. (Wall Street Journal.)

Elk Increase Nature Magazine (May) says: "Some 20,500 head of
in Forests elk are now to be found in the National Forests of Colorado, representing an increase of 455 per cent since 1914, according to an announcement by the Division of Wildlife and Range Management of the regional office of the U. S. Forest Service. The increase has been steady despite open seasons each year since 1929. Today elk are found in all of the fourteen National Forests, including those in which all of the original stock had been killed. Animals from northern Wyoming herds were introduced to replenish the stock and have increased through protection and control of kill."

Alfalfa Resists Wilt "Alfalfa breeders will pass an important milestone during April with the distribution of eight new wilt-resistant strains for seed increase", says the Nebraska Farmer (April 22). "They were developed in experimental breeding plots at the Nebraska Experiment Station. And the plant breeders who produced them fulfilled an ambition 10 years old. Those eight new strains are more resistant to bacterial wilt than any commercial variety now available. They are the best of between 700 and 800 strains produced through foreign exploration, thorough search in the best fields of Nebraska, and years of patient crossing and selection. They have been experimentally tested in 40 different states. . . This seed probably will not be available in sufficient quantities for general distribution to Nebraska farmers until around 1942, according to Dr. H. M. Tysdal, in charge of alfalfa breeding work at the Nebraska Agricultural College. . . The 10-year search began back in 1929. . . Dr. Westover, in the U. S. Bureau of Plant Industry, led several expeditions which brought back promising old-world strains--chiefly from Turkistan in western Asia. And at Lincoln Dr. Tysdal, another USDA man, tackled the job from another side, with the help of the agronomy and plant pathology departments at the agricultural college. Dr. T. A. Kiesselbach of the agronomy department and Dr. G. L. Peltier--then a plant pathologist at the ag college and now a bacteriologist at the University of Nebraska, played important roles. . ."

Rural Power Cost Reduced "Electrical engineering has reduced the cost of bringing electric power to the American farmer by at least 60 per cent during the last decade by the development of radically new methods of stringing electric lines and by turning to new types of wires," says a Science Service report. "With government and utilities concentrating on bringing electricity to the entire countryside during the next decade, as city lines and inter-city wires are long since completely strung, distribution system costs have been cut from \$1,200 and \$1,500 a mile to \$500 a mile. . . The latest studies have shown that many rural lines have had unnecessarily high current-carrying capacity engineered into them at great expense. Some lines were actually built to take ten times the load for which they are over used. This new triumph of the engineer's art dates back to the creation of the Rural Electrification Administration. . ."

Export Trade Increases United States export trade in March registered an increase of \$49,804,000 in value over February. The total value of shipments was \$268,364,000 and compared with \$218,560,000 in February and \$275,308,000 in March, 1938. The value of imports in March was \$190,416,000, compared with \$158,035,000 in February and \$173,372,000 in March, 1938. In making public the results of the month's foreign trading, the Department of Commerce said the increase in shipments was due principally to an advance in foreign sales of manufactured goods. (Press.)

Senate Both Houses received the President's reorganization
April 25 order (H. Doc. 252) (see Daily Digest, page 1, April 26).

Mr. Bankhead submitted an amendment which he intends to propose to H. R. 5269, agricultural appropriation bill, appropriating \$150,000,000 additional for Federal Surplus Commodities Corporation. The amendment limits amount devoted to any one commodity to 25 percent and amends the law regarding exportation of cotton articles.

Agreed to the conference report on the War Department military appropriation bill, H. R. 4630. This bill will now be sent to the President.

Adjourned until April 27.

House Agreed to the Senate amendment to H. R. 3134, to
April 25 amend the act authorizing temporary detail of U. S. employees to foreign countries by permitting the crediting of reimbursements from such countries to the appropriations from which the expenses were made. This bill will now be sent to the President.

Passed with amendments S. 572, to provide for acquisition of stocks of strategic and critical materials for use in time of emergency.

The Committee on Agriculture reported the following without amendment: H. J. Res. 247, to provide minimum national allotments for cotton (H. Rept. 482); H. J. Res. 248, to provide minimum national allotments for wheat (H. Rept. 483). The same committee reported the following with amendment: S. 1096, to amend section 8 (c) of the Agricultural Marketing Agreement Act of 1937 to make its provisions applicable to Pacific Northwest boxed apples (H. Rept. 481); H. R. 5498, to make applicable to the years after 1939 the special provisions relating to cotton balage and acreage allotments which apply to 1939 (H. Rept. 484).

(Prepared by Office of Budget and Finance.)

CCC Aids The Federal Government is doing more today than ever
SCS Work in its history to check soil erosion, but it will take twenty to thirty years of continuous effort to get the danger under control, according to Dr. Hugh H. Bennett, chief of the Soil Conservation Service. Dr. Bennett made known his views to the House Labor Committee in testifying in favor of making the Civilian Conservation Corps a permanent organization. He explained that the government now maintains 355 soil conservation camps and employs in that work about 70,000 enrollees of the CCC. He said that the CCC men had been found extremely satisfactory for that kind of work and that such a supply of "highly efficient type of labor" must be assured for the twenty to thirty-year program he had in view. (New York Times.)

Landscape Of interest in Landscape Architecture (April) are an
Architecture editorial on "Landscape Architecture in Public Park Design" and an article, "Landscape Development Based on Conservation" (as practiced in the National Park Service) by Henry V. Hubbard, American Society of Landscape Architects. The article is a 17-page one illustrated with photographs.

DAILY DIGEST

prepared in the Press Service, Office of Information, U. S. Department of Agriculture to present items of interest to agriculture and to agricultural workers. Views and opinions in these items are not necessarily approved by the Department.

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Section 1

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FREIGHT RATE CLASSIFICATION President Roosevelt passed along to Congress yesterday a report from the Tennessee Valley Authority which complained that present freight rate classifications discriminated against the South, Southwest and West. The report, which supplemented the TVA's study of freight rates in 1937, said discrimination was so sharp that products of eastern Canada sent to eastern United States markets had a rate advantage over those from other sections of the United States. This, it said, was an example of widespread need for freight rate regulation which, it held, Congress should undertake. Alleged discriminations against the southern territory were outlined in the 1937 study. Yesterday's supplement added the southwestern and western trunk line territories to the affected area. (A.P.).

MERIT BILL APPROVED The House Civil Service Committee has directed Chairman Ramspeck to report favorably to the House his bill to blanket into the classified civil service practically all employees now exempt except those holding policy-forming positions. This bill was said to cover about 200,000 employees not now under civil service. Two amendments were made to the bill, one of which exempts all WPA employees. The second amendment provides that an employee taking a non-competitive examination as provided under the bill and failing to pass will be separated from the payroll within six months. (Washington Star.)

FHA INSURANCE LEGISLATION The Senate voted a \$1,000,000,000 increase in the mortgage insurance limit of the Federal Housing Administration yesterday along with a two-year extension of numerous activities to stimulate residential construction. The House-approved legislation now goes back to the House for consideration of changes made by the Senate. The \$1,000,000,000 increase, approved by both chambers, would be in addition to the present \$3,000,000,000 limit on FHA mortgage insurance. Additional authorization would be used only if the President approved. (A.P.).

INCOME PAYMENTS Income payments to individuals in the United States amounted to \$16,105,000,000 in the first quarter of 1939, an increase of 2 percent over the \$15,788,000,000 in the corresponding period of 1938, the Department of Commerce announced yesterday. The March total was 3.3 percent higher than in March 1938 but industrial payrolls continued to decline. The March advance in the index reflected largely the sharp rise in cash income from farm marketings and a marked expansion in unemployment insurance benefits. (New York Times.)

Minn. Hybrid
Corn Law

A new Minnesota law defines hybrid seed corn and requires that all corn to be sold as hybrid must conform to the definition and be labeled as such. The label must also show the year, county and state in which the seed was raised and the approximate number of days of growing season for the particular variety from emergence of the corn plant above the ground to maturity in the section in Minnesota where the corn is intended to be grown. The law imposes upon the Agricultural College and the State Department of Agriculture the duty of establishing corn growing zones in the state and to publish for each zone the approximate number of days of growing season required for corn to mature in each zone. Violation of the law is made a misdemeanor punishable by fine or imprisonment. (The Farmer, St. Paul, April 22.)

Firmness of
Tomatoes

"Taking advantage of a simple chemical reaction whereby a jelly-like compound is formed when calcium chloride is added to pectic acid, Dr. Z. I. Kertesz, chemist at the New York Experiment Station at Geneva, has demonstrated that this reaction can be used to good advantage in the canning of tomatoes and possibly other vegetables and fruits to insure that the product will retain its natural firmness during preservation," says an editorial in Fruit Products Journal (April). "It is a matter of common knowledge that calcium has a hardening effect on plant tissues and considerable effort has been made in the canning industry to avoid the use of water containing undue amounts of calcium and magnesium because of the toughening of plant tissues," says Dr. Kertesz. "Even calcium applied as a fertilizer tends to toughen canned peas, and sometimes the canner will soak his raw products in common salt solution to soften the tissues by exchanging the calcium and magnesium in the tissues with the sodium from the salt. However, it is often desirable to retain the natural structure of vegetables, particularly tomatoes, in the canned product, hence this proposed method reverses the usual procedure and replaces sodium with calcium which, in turn, forms a gel-like compound with the pectic acid in the plant tissue and supports the cell structure during the destructive heating process. When treated in this way, the tomatoes will often "roll out of the can" and stand up almost like fresh tomatoes." In addition to tomatoes, Dr. Kertesz has experimented with apples, peaches, strawberries, and other products with encouraging results. . ."

Seed Cleaning
Service

Nation's Agriculture (May) reports that the Scott County (Mo.) Farm Bureau organized a county service company, with the Farm Bureau holding all the common stock, and bought a large seed cleaner which was installed on a trailer. A man was hired to take the outfit to farms and do the cleaning. The complete outfit cost less than \$1,000 and in less than two years the income from it has amounted to \$3,247.74.

Sources of Vitamins

Adding extra vitamins and minerals to foods, to prevent pellagra and other diseases due to lack of vitamins, was vigorously denounced recently as "shotgun" prescribing, wasteful, inefficient and possibly harmful by Dr. W. H. Sebrell of the U.S. Public Health Service to the American Institute of Nutrition, says a Science Service report. The only exception made by Dr. Sebrell is the addition of rickets-preventing vitamin D to milk for children in areas where there is not enough sunlight at all seasons of the year to protect them from rickets. Dr. Sebrell said, however, that he considers this a special case "which in itself makes it undesirable to add vitamin D to other foods." Prime objection to adding vitamins and minerals to foods, Dr. Sebrell pointed out, is that this will increase their cost and thus prevent any good results. If, as surveys show, many families do not get enough vitamins in their diet because they have not enough money to spend for food now, increasing the cost by adding vitamins will make the problem worse instead of better. If foods were to be fortified, Dr. Sebrell pointed out, it would be most difficult to decide which foods should have vitamins and minerals added, which vitamins and minerals should be added and in what amounts. The question of the amount of vitamins to be added brings up the question of possible harm from fortification of foods.

An address on the same subject by E. M. Nelson, of the Food and Drug Administration, said: "In our control work we are conscious of an extensive, rapidly growing and constantly changing industry in vitamin preparations. It is estimated that during the year 1938 more than \$100,000,000 were spent for vitamin preparations by the people of the United States. Generalizations with respect to the need for fortification of our foods frequently lead to errors. It seems desirable to consider each vitamin or mineral, and each food which may be fortified, individually. . . Practically all aspects of the desirability of fortifying foods with vitamins or minerals have long been problems of the Food and Drug Administration in considering the propriety of the representations that have been made for various vitamin and mineral preparations. . . The Food, Drug, and Cosmetic Act, which was passed last year, will require more informative labeling of food products which may be fortified with vitamins or minerals. Extensive fortification of food may possibly lead to increased and more difficult problems of control from the standpoint of assuring the consumer that the product has the vitamin content claimed. That, however, should be no deterrent if there is satisfactory evidence that an important portion of our population would benefit from such vitamin additions to staple food products." (New York Times.)

Fertilizer Service

A spread-on-the-land fertilizer service is now being offered by the Grange-League-Federation (co-op) at its Bridgeton, New Jersey, mixing plant, to all farms within a radius of 20 miles or so. In trucks that have endgate fertilizer distributors, the plant food is hauled in bulk from the mixing plant and spread on the field. Where as much as one ton to an acre is applied, the savings in bulk handling, and elimination of bags, pays for the service of spreading. (Farm Journal and Farmer's Wife, May.)

House Received the conference report on H. R. 5219, second
April 26 deficiency appropriation bill. The conferees agreed to
the item of \$6,500,000 (including a reappropriation of
\$1,500,000) for administration of the Sugar Act of 1937. The item of
\$100,000 for Dutch elm disease eradication was reported in disagreement.
Other items for this Department are: Fighting forest fires, \$2,480,000;
authorization for expenditure of \$60,000 of the hurricane-damage appro-
priation in New York; enforcement of Federal Food, Drug, and Cosmetic
Act, \$15,000; and increase in limitation for international production con-
trol committees from \$17,500 to \$25,500.

Received the conference report on H. R. 4492, Treasury-Post Office
appropriation bill. The amendment denying the franking privilege to
Government publications the sending of which has not been requested and
is not required by law, was reported in disagreement.

Received the conference report on H. R. 4852, Interior appropriation
bill.

The Committee on Public Buildings and Grounds reported without amend-
ment H. R. 1790, to authorize additions to the Sequoia National Forest,
Calif., through exchanges under the act of March 20, 1922, or by procla-
mation or Executive order (H. Rept. 499). The Committee on Foreign Af-
fairs reported with amendment H. R. 5835, to authorize the President to
render closer and more effective the relationship between the American
republics (H. Rept. 508). The Committee on Rivers and Harbors reported
without amendment H. R. 3223, for the completion of the Atlantic-Gulf
Ship Canal across Florida (H. Rept. 509).

The Senate was not in session. Next meeting, April 27.

(Prepared by Office of Budget and Finance.)

Migratory The position of the migrant worker in California,
Workers his attempts to find a place in an over-saturated labor
market and his relation to the general picture of both di-
rect and work relief are set forth in a publication, Transients and Mi-
grants, just issued by the Bureau of Public Administration, University
of California. The study, which was prepared by Victor Jones, research
assistant, presents the problems of the migrant worker. So great have
been his numbers in the state in recent years, that he is materially
changing the biologic picture of farm labor generally. He has intro-
duced new factors into the general family, linguistic and cultural char-
acteristics of agricultural laborers. Since 1924 he has produced an ex-
cess of agricultural labor over demand in the state, with the single ex-
ceptions of October in 1936 and 1937, an excess that now constitutes
what many regard as the state's chief economic problem. (Pacific Rural
Press, April 22.)